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**2006**  
**“SCHOOL BUS SAFETY IS...  
ONE BUS STOP AT A TIME”**



*“For the Children”*

## **NYS MASTER INSTRUCTORS**

The New York State School Bus Safety and Driver Training Program is directed by the State Education Department with program assistance from Eastern Suffolk BOCES and the Pupil Transportation Safety Institute. The instructional backbone of the program is Master Instructors who have been trained by the Education Department to provide instruction to not only school bus drivers but also to the 1000 plus School Bus Driver Instructors (SBDIs) who are responsible for training drivers across the state. They are listed here in recognition for their work in developing the program which drives the school bus safety effort in New York State.

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Pat Bailey	Jim Ellis	Peter Montalvo
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Marty Dratz	James Minihan	

## **NYS EDUCATION DEPARTMENT (SED) SBDI ADVISORY COMMITTEE**

During the past year the SBDI Advisory Committee has helped develop the guidelines for the school bus driver training program in New York State. They have worked to develop the physical performance test for monitors and attendants, developed a response system to serious and fatal accidents, developed criteria for a Basic Course of Instruction for monitors and attendants, and approval of the 2006 PDS.

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# SCHOOL BUS SAFETY IS... ONE BUS STOP AT A TIME

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## PREFACE

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This document was created to enhance school transportation safety for the more than 2,300,000 children who ride school buses each day in New York State. Its distribution to school bus drivers is required in all Pre-Service and Basic or Advanced Courses.

This document should also be distributed to the following groups: Children, Parents and Parent Organization, Supervisors, Administrators, School Board members, Teachers, School Transportation Organizations, Legislators, the Media, and any other interested groups/individuals.

The highest level of student safety cannot be achieved until all who are involved with school transportation are fully aware of the potential dangers.

This document analyzes forty-three years of school transportation fatalities. It describes the lessons from these tragedies and the recommended procedures for avoiding such tragedies in the future.

This document was originally conceived and developed by Mr. Lee Comeau of the State Education Department.

If you have suggestions and/or comments about this document, please forward them to:

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The New York State Education Department  
School Bus Safety & Driver Training Unit - Room 876 EBA  
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January 1, 2006

Dear New York State School Bus Driver, Attendant, and Monitor:

Welcome to the wonderful world of pupil transportation. You are embarking on a rewarding career. The job of a school bus driver is like none other in the world. The roles you will play are varied, and the responsibility is profound. The purpose of school bus driver training is to provide you with the knowledge and tools you will need to become a safe school bus driver and how to ensure the safety of the children you transport each day from home to school and back again. All the training you receive, all the laws and regulations you will be exposed to, have one single purpose – to ensure the safety of children.

You are the most important ingredient in the recipe for safety. You hold the lives of many children in your hands every time you get behind the wheel of a school bus or supervise children on the ride to or from school. Anyone can transport cargo, but only a pupil transportation professional, a well-trained and caring school bus driver, attendant, or monitor can safely transport and supervise children.

This document incorporates what our state has learned over the past 44 years concerning safe pupil transportation. Our goal is to give you a head start, the benefit of that knowledge and experience, to help you become a safe school bus driver, attendant or monitor. Please take full advantage of this training program: listen carefully; ask the instructor questions about anything you don't understand; and participate actively in class discussions and activities. Remember: children's lives are in your hands.

You have my sincerest best wishes for a safe and rewarding career as a New York State school bus driver, attendant, or monitor.

Sincerely,

Marion F. Edick, State Director  
Pupil Transportation Services

# NEW YORK STATE SCHOOL BUS TRANSPORTATION STUDENT FATALITIES A DIAGNOSTIC ANALYSIS 2/1/1960 - 6/30/2005

School bus accidents resulting in student fatalities are a reality for the school transportation community. Careful examination of the circumstances and causes surrounding such tragedies helps us learn how to prevent them in the future. This document is a detailed examination of the trends and lessons which have been identified by an analysis of school bus accidents in New York State since 1960.

School buses can be involved in many types of accidents, with or without student passengers. For the purpose of this document, a “school bus student fatality” is defined as a student killed while riding in, entering, or exiting a school bus. Fatalities occurring to school bus drivers or attendants, pedestrians who were not entering or leaving the bus, or passengers in other vehicles are not included in “school bus student fatalities.” Based on this definition, 108 student school bus fatalities have occurred in New York State since 1960. Five additional student fatalities occurred during charter bus transportation on school trips.

## TREND #1 YOUNGEST STUDENTS AT RISK

**Overall, children ages 4 - 8 (grades k - 3) were most susceptible to a school bus fatality. Children ages 4 - 8 were involved in 75 of the fatalities (70%) even though they represent less than 35% of the school population.**

- ◆ Younger children are shorter so they are harder for bus drivers and motorists to see. They can't see over or around objects like parked cars or bushes.
- ◆ Their hearing has not completely developed; they can not easily tell where sounds are coming from.
- ◆ Their vision has not completely developed; they can not estimate the speed of an approaching object.
- ◆ They are inexperienced regarding road hazards and how to act safely around school buses.
- ◆ Young children have very short attention spans and need lots of repetition to learn a safety procedure.



## TREND #2

# MOST FATALS OUTSIDE THE BUS

*4.5 times more likely*

88 of the 108 fatalities (80%) involved students as PEDESTRIANS during the LOADING/UNLOADING PROCESS at a bus stop or school. Students are most vulnerable to serious accidents at this time because they are not inside the bus. Loading or unloading accidents are of two types: 1. A child is struck by the school bus (BOB or By-own-bus). 2. A child is struck by a passing motorist (PM or Passing motorist).

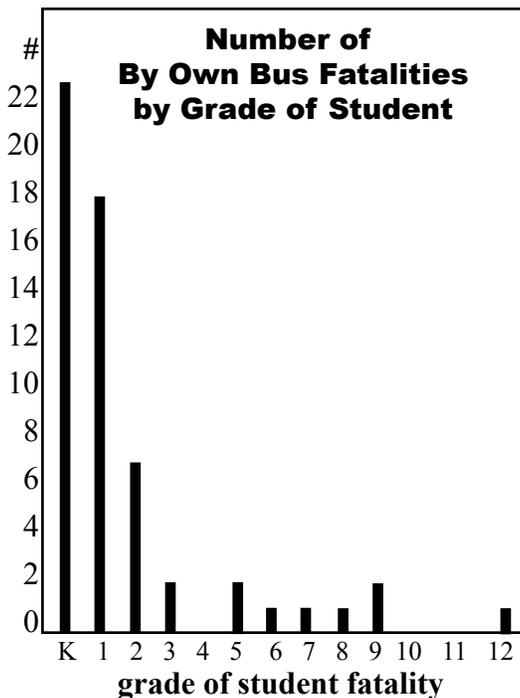
Loading and unloading fatalities typically involve one or more of the following factors:

- ◆ Child crossed too close to the bus and the bus driver didn't see the child.
- ◆ Child dropped something under the bus and tried to get it.
- ◆ Child slipped under the side of the bus.
- ◆ Child was struck by a motorist illegally passing the bus.
- ◆ Child's drawstring or backpack straps were caught in handrail or door and the child was dragged by the bus.

### PEDESTRIAN LOADING/UNLOADING FATALITIES BY TYPE

<u>NO</u>	<u>TYPE</u>	<u>% of 88</u>	<u>% of 108</u>
61	By School Bus	69%	56%
	59 By Own Bus (BOB)		
	2 By Another School Bus		
<u>27</u>	By Passing Motorist	<u>31</u>	<u>24</u>
88		100%	80%

### BY OWN BUS PEDESTRIAN FATALITIES



#### GRADE LEVEL -

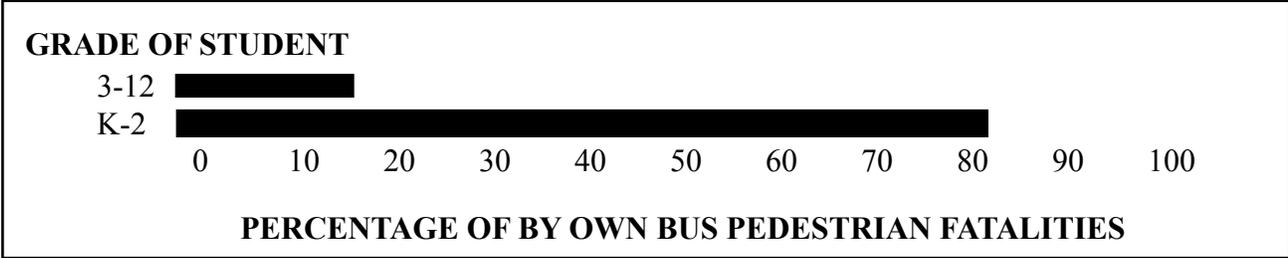
#### Kindergarten and 1st Grade

71% of all By Own Bus (BOB) Fatalities!

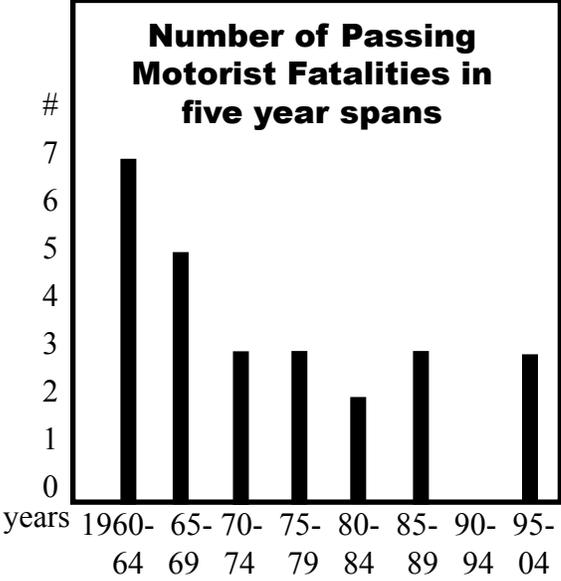
71% (41 of 58 students whose age is known) of all BOB fatalities were in grades K-1...(23 fatalities grade K, 18 fatalities grade 1). Even compared to students in second grade, only one year older, **GRADES K & 1 WERE ALMOST THREE TIMES MORE SUSCEPTIBLE** to by own bus fatalities (7 fatalities grade 2).

**OF GREATER SIGNIFICANCE....** When compared to all other grades, children in grades K-2 are 15 TIMES more likely to be run over by their own bus.

**FROM 1989 to 2004 THERE HAVE BEEN ONLY 6 BOB FATALITIES**, 4 in New York City where the Crossing Poster and Universal Crossing Signal are not used.



**PASSING MOTORIST PEDESTRIAN FATALITIES**



Even when the red lights are flashing, motorists sometimes pass on the left OR right side of buses which are stopped to load and unload students. Bus drivers and student pedestrians alike must be constantly aware of this danger.

Passing motorist fatalities typically involve one or more of the following factors:

- ◆ Motorists claim they didn't have time to wait.
- ◆ Motorists claim they couldn't see the flashing lights because the lights were dirty or because sun, rain, snow, or fog blinded them.
- ◆ The bus driver waved the car through the red flashing lights not knowing a child was crossing the road.
- ◆ The motorist had no regard for the law or children's safety.

Of the 26 student pedestrians who were struck and killed by a passing motorist, 4 - 8 year olds represent 70%, as opposed to BOB where 87% are 4-8 years old.

Of the 26 student pedestrian passing motorist fatalities, 61% occurred during the fourteen years from 1960-1973, 31% happened the next fourteen years. And then...

**THE 110 MONTHS FROM 4/23/87 TO 6/21/96 WAS THE LONGEST PERIOD ON RECORD BETWEEN PASSING MOTORIST FATALITIES. PASSING MOTORIST FATALITIES IN 1999 AND 2004 HIGHLIGHTS THE NEED TO STAY VIGILANT DURING LOADING AND UNLOADING. LET'S COMMIT FOR ANOTHER 63 MONTHS - plus!**

After several passing motorist fatalities over a short period of time, an intensive campaign was launched in 1985-86 to alert the public of its legal, if not moral, obligation to stop for school buses that were stopped with red lights flashing.

The Education Department, School Districts and Contract

providers of transportation services (in partnership with private business, local governments and the Governor’s Traffic Safety Committee) designed several campaigns to alert the motoring public and parents of their obligation to stop for stopped school buses. Twice, the legislature amended the law to provide for stiffer penalties for passing stopped school buses. Several years later, significant improvement has been made in reducing what once was a serious problem.

However, school bus accident reports of “near misses” and students being injured, and of school bus drivers saving children’s lives during the loading/unloading process, reminds us that public awareness campaigns and school bus driver alertness during the loading/unloading process continue to be essential in managing this problem.

## **PASSENGER FATALITIES**

Passenger fatalities typically include factors such as the following:

- ◆ Bus involved in traffic accident with a train or other vehicles on the road, or drives off the road and strikes a fixed object.
- ◆ Student puts their head out the window as the bus passes a utility pole, sign, or another vehicle.
- ◆ Student jumps from a moving bus.

Passenger fatalities are usually the result of: temporary inattention on the part of the school bus driver, lack of student control, or improper techniques for observing the environment. The average age of passenger fatalities is 12 years old.

<u>Deaths.</u>	<u>ACCIDENT</u>	<u>% of 108</u>	<u>% of 20</u>
5	Bus/Train (Congers, NY 1972 - 5 students))	5%	25%
5	Bus collisions with other vehicles (#’s 5, 40, 65, & 87 in data base)	5	25
4	Students' heads outside windows (#’s 36, 72, 99, and 103 in data base)	4	20
4	Bus drove off road (#’s 82, & 96 and 97, 101)	4	20
2	Fatal injuries jumping from moving bus (#’s 94 & 98)	2	10
<hr style="width: 20%; margin: 0 auto;"/> 20		<hr style="width: 20%; margin: 0 auto;"/> 18	<hr style="width: 20%; margin: 0 auto;"/> 100

# CHARTER BUS FATALITIES

**Five fatalities have occurred while children were being transported by charter “coach” buses. While these are not “traditional” student school bus fatalities, they highlight the need to maintain the same high standard for charter bus drivers and equipment as for school bus transportation. The State Education Department and Department of Motor Vehicles have both established recommended guidelines for selecting charter coach operators.**

All five students were ejected from the charter buses during roll-overs. Both accidents occurred in winter months during inclement weather. Both drivers lost control of buses that were driven too fast for conditions. In the 1973 accident, the bus hit an ice patch on the highway, proceeded to turn sideways and left the ice patch. When the bus returned to dry pavement it rolled, ejecting and then crushing the three victims. In the 1992 accident, the driver lost control in wet, slushy snow and the bus left the highway, rolling down an embankment. Again, the victims were ejected and crushed by the bus.

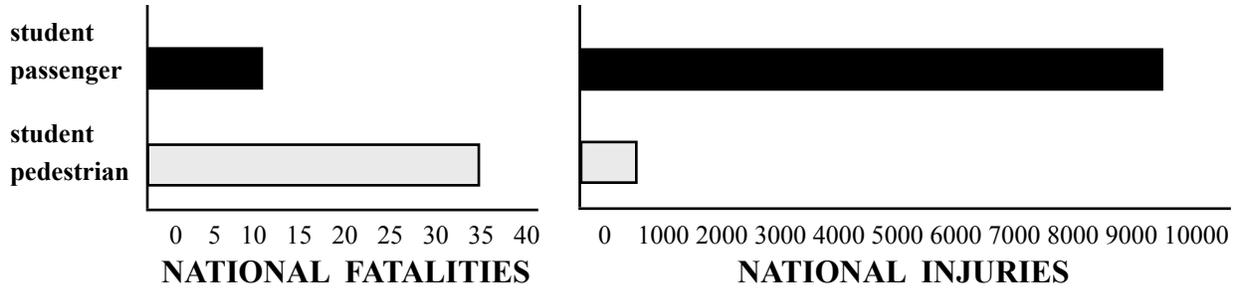
<u>NO.</u>	<u>Accident</u>	<u>% of 5</u>
3	01/03/73 Vestal Swim Team, Rt. 17 (#’s 1-3 in charter bus data base)	60
<u>2</u>	04/11/92 East Meadow UFSD, Rt. 87 (#’s 4-5 in charter bus data base)	<u>40</u>
5		100%

**While most fatalities occur outside the bus in the loading/unloading process, THE OVERWHELMING MAJORITY OF SCHOOL BUS INJURIES OCCUR TO PASSENGERS INSIDE THE BUS. Approximately 9,500 students across the country are injured each year as school bus passengers compared to 808 injured outside the bus as pedestrians.**

**TREND #3**  
**MOST INJURIES**  
**INSIDE THE**  
**BUS**

- ◆ Two thirds of the passenger injuries are minor injuries, but even these can result in major lawsuits and settlements for districts and/or contractors.
- ◆ Students who are out of their seats are most vulnerable to injury because they are not positioned to benefit from the protection the bus design provides them. Whether students are legitimate standees or goofing around, they can be injured even in a non-collision maneuver or quick stop.
- ◆ Students sitting in the rear or front seats have been shown to be most at risk for injury or death in frontal or rear collisions, the most common types.
- ◆ Drivers must be aware of all injuries to bus passengers, no matter how minor. Every injury should be reported to a supervisor for appropriate action.

**FATALITIES vs. INJURIES for STUDENT PASSENGERS and PEDESTRIANS**

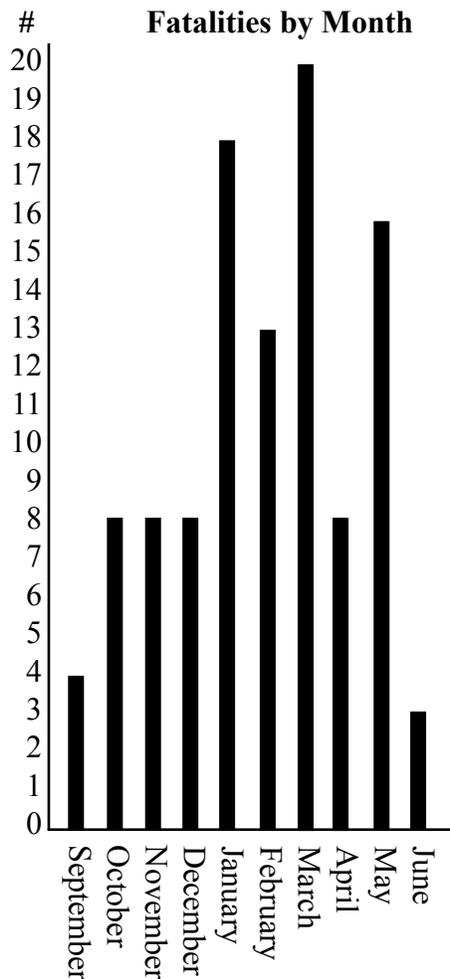


**TREND #4  
MOST DANGER  
AFTERNOON &  
MIDYEAR**

**Most fatalities take place on the afternoon trip home from school.**

- ◆ Students and drivers alike often are thinking about what they will do when they get home instead of concentrating on safely unloading.

**Most fatalities take place during the months between December and May.**



- ◆ School bus drivers, students and motorists are lulled into complacency once school has been in session for a few months. Interestingly, June and September have the least fatalities. Drivers expect the unexpected in these months and really concentrate.

55 of the 108 fatalities occurred on the trip home; 14 on the trip to school. The balance of 39 are unknown with respect to the activity engaged in at the time of the fatality. **This means that a total of 80% of the fatalities with information available happened on the trip home.**



## FATALITIES BY MONTH FOR: BY SCHOOL BUS, PASSING MOTORIST AND PASSENGER

BY OWN BUS  
OR BY ANOTHER BUS

PASSING  
MOTORIST

SCHOOL BUS  
PASSENGER

January	14	March	6	May	5
February	10	May	5	March	5
March	9	April	4	January	3
December	6	November	3	December	2

**MOST  
DANGEROUS  
MONTHS**

October	6	September	2	September	2
May	6	February	2	October	1
April	5	June	2	November	1
November	4	January	2	February	1
June	1	October	1	April	0
September	<u>0</u>	December	<u>0</u>	June	<u>0</u>
	61		27		20 = 108

### TREND #5 TRAINING MAKES A DIFFERENCE

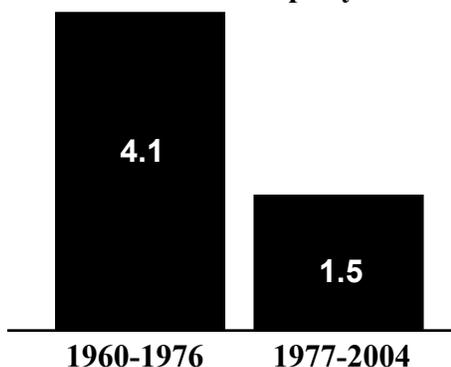
#### DRIVER AND STUDENT TRAINING PROGRAMS HAVE REDUCED FATALITIES DRAMATICALLY!

The 1977 BASIC Course of Instruction set a new standard for driver training. Since that time there has been a **59% decrease in student fatalities per year.**

67 fatalities occurred from 1960-76 or 4.1 per year. From 9/1/76 - 6/30/2005, 41 fatalities occurred or 1.5 per year. This represents a 61% reduction from the 1960-76 period when driver training was less regulated and/or advanced. These figures demonstrate the importance of today's driver, instructor and student training efforts and use of team management concepts in operating today's program as a **school transportation safety team.**

K-6 Classroom Curriculum for School Bus Safety, the Safe Crossing Video and the State Education

student fatalities per year



Department Crossing Poster where introduced in the late 1980's. Seven children have been killed as pedestrians since 1990. Outside of New York City, where these materials are not used, there have been only three pedestrian fatalities since 1988.

**NON-TREND #1  
BAD WEATHER**

**Bad weather conditions do not cause fatal accidents. In fact, accident reports indicate that MOST ACCIDENTS HAPPEN ON CLEAR SUNNY DAYS.**

Early New York data, for the most part, does not indicate the weather conditions at the time of the fatality (this was corrected beginning 1984-85). National statistics, however, show that the greatest number of national fatalities occur on clear, bright, sunny days. Since New York's other statistics follow those at the national level and since 85% of the fatalities since 1984-85 occurred on bright, sunny days, it is projected that most of our fatalities probably occurred on bright, sunny days.

**NON-TREND  
#2  
GENDER**

**Child's gender is a non-trend for school bus fatalities.**

Boys and girls have been equally susceptible as school bus fatalities. **By own Bus and Passing Motorist** fatalities are equally split between boys and girls. Only passenger fatalities show any difference, and that is a result of random seating position at the time of the accident. Of the 108 fatalities during "traditional" school bus transportation to and from school on school buses from 2/1/60 - 6/30/2005, 46% were girls and 54% were boys.

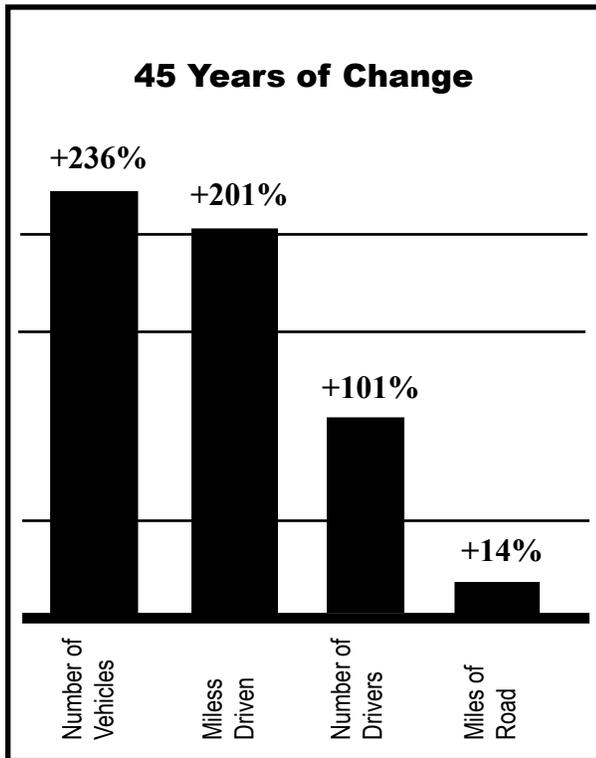
This "non-trend" is unusual compared to some childhood accident data. Four times more boys die in bicycle accidents than girls and almost twice as many boys die as pedestrians and by drowning.

**SUMMARY - WHAT DOES ALL THIS MEAN?**

An effective school transportation safety program requires that students, drivers, parents, school administrators and affiliated groups **BE AWARE** of the basic characteristics that are most likely to lead to a school bus fatality. This awareness, **COUPLED WITH A STRONG ELEMENTARY GRADE LEVEL SAFETY CURRICULUM THAT UTILIZES THIS INFORMATION**, is the most important action that can be taken to enhance the safety of a child's ride to and from school and school activities.

## 44 YEARS IN REVIEW: Safer Than Ever

School Bus Safety is One Bus Stop at a Time outlines the history of school bus safety in New York State. The story of decreasing fatal accidents is clear from the charts and graphs in this document. What is not clear is how the environment school buses operate in has been changing over these forty three years. When you finish reading this report, you will know why this page is titled, "Safer Than Ever"



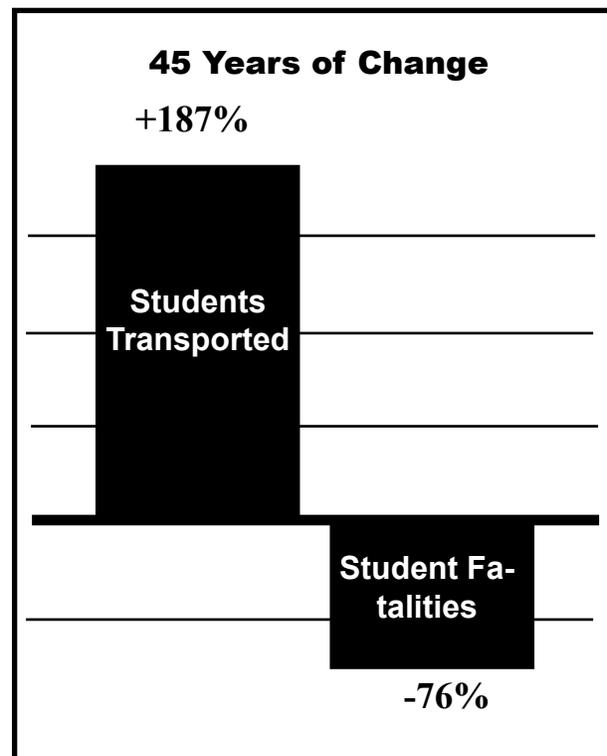
### National Traffic Environment

Since 1960 the national traffic environment has changed significantly. Number of cars on the road, number of licensed drivers, and number of miles driven have all increased dramatically. The one traffic measurement that has not changed significantly is the number of miles of road. More drivers and vehicles without more road means driving a school bus has gotten harder.

These environmental changes have contributed to road rage and traffic congestion and certainly make school bus drivers' jobs significantly more difficult.

### Population and Transportation Changes

During these forty four years much has changed in the New York educational system. Overall population has grown, but more significantly, the neighborhood school has disappeared. School districts have consolidated and few children are walking to school. 800,000 students rode school buses in 1960, and over 2,200,000 do today. The safety side of the story is even more amazing - 37 students died in school bus accidents in the 1960's and only 9 died in the 1990's. In rough figures, the riding population is three times greater and the fatalities were reduced 3/4. This means that 1 in 216,000 bus riding students died each year in the 1960's and 1 in 2,500,000 died each year in the 1990's. It would never be suggested that even one death is acceptable, but a ten-fold improvement in safety is a fact to be proud of.



## "Not My Kid, Not My Stop"

School bus drivers need to be highly aware of the possibility of children chasing after their bus. This can occur when a child mistakenly believes it's his or her bus and tries to catch it, or approaches the bus to meet a sibling getting off, or just because children enjoy chasing buses. Drivers need to be aware that children might appear from any direction at any time, especially anywhere near a bus stop.

In recent years, a number of incidents have taken place in which a child has been killed or seriously injured in these kinds of incidents:

- ◆ In two cases the children who were struck were routed to ride the bus that struck them but had missed the bus and were running to catch it. One child had chased the bus a full city block.
- ◆ In two other cases the victims were siblings of the child riding the bus. One was a two-year-old who got under the bus while the mother was talking to the bus driver, and one was a nine-year-old who rode across the street on a Big Wheel bike just as the bus was leaving the stop in the afternoon.
- ◆ The final case was a student who mistakenly thought a passing bus was his bus, running to catch it just as it turned a corner. He was killed.

The school bus stop is a dangerous place. During the 2003-2004 school year, 53 school bus crashes occurred at bus stops. Bus drivers must be highly alert for all potential hazards – pedestrians or vehicles – when stopped, approaching, or leaving the vicinity of a school bus stop. Drivers need to be aware of traffic behind their bus, and children can be anywhere. Just because it's "not my kid, not my stop" is no excuse for not being alert to children near the bus.

Use the Safety Alert below to help educate parents of preschoolers, daycare centers, and babysitters who receive young children from the bus.



### **SAFETY ALERT**

*Dear parent or preschool care provider: Your bus driver has been entrusted with the serious responsibility of protecting the safety of your child. The driver cannot control the hazards outside the bus. We ask your cooperation in making sure that a responsible person meet the bus every day to receive your child. This will ensure your child's safety as well as the safety of other children in the area.*

*We also wish to alert you to the dangers of long drawstrings or straps on children's clothing, or long mitten strings. Across the country, a number of incidents have occurred in which children's clothing or mitten strings became entangled in the bus door or handrail as the child stepped off the bus. In some cases, children have been seriously injured and even killed. Please make sure that your children's clothing does not have any long, dangling strings or straps that could jeopardize their safety while getting off the bus, as well as in other daily activities such as the playground.*

*Our only goal is to protect the safety of your child!*

*Thank you.*

# **SCHOOL BUS SAFETY IS A TEAM ACTIVITY TRAIN CHILDREN OVER & OVER & OVER AGAIN**

The accident analysis identifies certain key trends which can guide us in working with students. The key lessons learned are that boys and girls in grades K-3 who are getting off a bus are more susceptible than other children to a fatal accident. Such accidents usually take place from October to May. Students are most often struck by their own school bus, and secondarily by a passing motorist. Unlike fatalities, most student injuries occur when students are riding on the bus.

**\*\* WHAT CAN BE DONE? \*\***

**EDUCATION, EDUCATION AND MORE EDUCATION.** The student age group that is most susceptible to a school bus accident must be thoroughly educated about the dangers of riding a school bus. Student safety awareness (and, more important, their retention level) must be raised by frequent bus safety instruction. The following programs are recommended to increase awareness and improve the retention of critical safety procedures by these children:

## **IN THE SCHOOL**

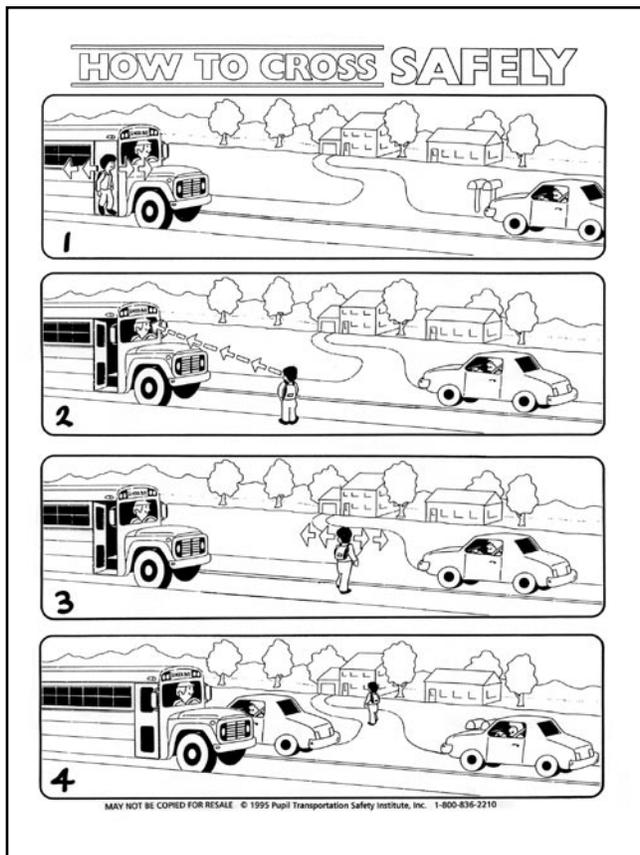
Many products have been created by the State Education Department to help train the youngest, most vulnerable children. Other products have been created which are based on the State Ed materials. Many other safety products are available from other sources. Be sure that what you use accurately displays the behaviors you want your children to follow. Inaccurate training information is dangerous.

- (1) **K-6 Classroom Curriculum for School Bus Safety** provides lessons for various parts of the year covering all school bus safety topics (320 pages).
- (2) **Safety video, "Safe Crossing: An EGG-cellent Idea,"** is a ten minute video especially for younger elementary students which focuses on safe crossing and riding behaviors.
- (3) **"How to Cross Safely"** poster is available in 17"x22" size for posting in classrooms and 8"x10.5" size for posting in the bus. The bus posters are a vinyl crack and peel material to stand up to the harsh environment inside a school bus. The safety message of this poster is described fully on the next pages.
- (4) **School Bus Safety Activity Book** is a 16 page coloring and activity book which uses illustrations from the K-6 Curriculum to stress the important topics of crossing, evacuation, danger zones, and riding safety.
- (5) **School Bus Safety Stickers** are nine stickers with illustrations from the Activity Book which students can put on their lunch box or backpack to help them remember the safety guidelines.

## ON THE BUS

In addition to a bus driver's day-to-day opportunity to train students in safety procedures, the three times a year **BUS SAFETY DRILLS** provide an additional opportunity for in-depth instruction. "Guidelines for a Quality Bus Safety Drill" are included in the appendix to this document.

The most important safety tool for use on the bus is the **SAFE CROSSING POSTER**. Schools should display the poster which illustrates the proper procedures for crossing in front of a school bus) so as to be at eye-level position to the 4-8 year old in classrooms and bus as they exit their classroom and bus. A safety illustration, posted at eye-level position, affords these children the opportunity to observe this critical life saving message each time they depart the classroom and bus, thereby enhancing the awareness and retention of the safety message.



Posters can be placed in a variety of areas in the classroom or on the bus, but posters near exits ensure children see this important message just as they **embark on the most dangerous part of their trip to and from school.**

Teachers, parents, and bus drivers should emphasize the safety message depicted graphically in the poster. The most vulnerable children are too young to retain information they read. Once explained, the message in the illustration is easily understood by young children.

**A HIGHLY VISIBLE** illustration will subliminally enhance the child's ability to retain the important safety messages. Professional, quality renditions of the crossing poster and other listed safety materials are available from the Pupil Transportation Safety Institute, 1-800-836-2210 or [www.ptsi.org](http://www.ptsi.org).

### **THE ILLUSTRATION SHOWS FIVE "LIFE SAVING TIPS":**

#### **LIFE SAVING TIP #1 ..... "CHECK BEFORE YOU STEP"**

**Students should be looking out the door for passing motorists and a safe space to step before they exit the bus....REASON....Buses are sometimes passed on the right side by inattentive or impatient motorists. If the student steps off the bus without checking first, he/she could be hit by a passing vehicle as they disembark.**

The second reason for “check before you step” is that the student should be sure the driver has stopped the bus in **a place that is safe to disembark**. The student should tell the driver if the bus is stopped in a deep puddle, close to a snowbank, or where there is no access to a safe space for the student to wait while the bus pulls away. This is especially important when a substitute driver is on the route who might not know the route well.

The third reason for “check before you step” is for drivers and students alike to be conscious of the possibility of drawstrings, scarves, or backpack straps which can get caught on bus handrails, in the door as it closes, or on a fire extinguisher or anything else in the stepwell. Over a dozen children have been dragged and killed in such accidents around the country. A dragging “close call” occurred in our state during the past school year. All school bus drivers must remain extremely vigilant about this danger!

## **LIFE SAVING TIP #2 . . . . . "I SEE THE DRIVER, THE DRIVER SEES ME"**

Students should be looking at the driver’s face while waiting to cross in front of the bus...REASON...If a student can see the driver’s face, the driver should, therefore, be able to see the student which means the child has removed him/herself out of the driver’s blind spot in front of the bus. No accident report ever indicated the driver could see the child he or she ran over.

“I SEE THE DRIVER, THE DRIVER SEES ME” is a phrase that’s easy for children (and adults) to learn and remember. Eye contact between driver and student is extremely important in the “crossing” situation. The important point is...

## **VISUAL CONTACT BETWEEN DRIVER AND STUDENT IS CRITICAL**

NOTE: If you drive a flat front, “transit style” bus, be sure to make the children walk at least “ten giant steps” in front of the bus to wait for your signal and cross. If not, they could get into a habit of standing just a few feet in front of the bus and be in great danger if they happen to ride a conventional style bus sometime in the future.

## **LIFE SAVING TIP #3. . . "WAIT FOR THE DRIVER’S SIGNAL TO CROSS"**

Students cannot see through the school bus when looking back to see if cars are coming. The school bus driver, properly utilizing all mirrors, is in a position to analyze what the traffic is doing. **It is only when the bus driver is convinced that traffic is controlled** that the driver gives the child the signal to cross the highway... utilizing proper crossing procedures while doing so.



Use the “**Universal Crossing Signal.**” Hold hand with palm facing the student until it is safe to cross. Then with your thumb pointing up, index finger extended out (pointing), remaining three fingers curled in toward the palm of the hand (like a clenched fist). Driver points at the child and slowly motions from right to left (left to right, if loading) indicating that the child should proceed across the road following proper crossing procedures.



(NOTE: There has been some confusion about the symbolism of this signal. It is not a “pistol” signal which could evoke the violence that haunts our society. It is a TWO PART SIGNAL. The “thumbs up” signal indicates that the coast is clear, and then the index finger points in the direction to travel.)

#### **LIFE SAVING TIP #4. . ."LEFT, RIGHT AND LEFT AGAIN"**

Students need to stop and look both ways as they cross in front of the bus...REASON...If students see passing motorist early enough, they should be less likely to be hit and more likely to retreat to safety if properly educated to do so.

When crossing a highway as a pedestrian, or entering an intersection when driving, the traffic we encounter that will reach us first is always coming from the left. This being the case, children should be taught to look “**LEFT, RIGHT THEN LEFT AGAIN**” It is also logical as children move to the outside edge of the bus as they cross the road that they look left first, because the view to the right has been clear as they initially entered the roadway.

Students should practice stopping midway to check for oncoming traffic as they cross in front of the bus...REASON...stopping encourages children to look carefully for motorists, and to not run across the highway immediately upon discharge, which is very dangerous.

#### **LIFE SAVING TIP #5. . ."USE BACKPACKS OR BOOK BAGS"**

**Students should carry books and other itmes in a backpack, tote bag, etc....REASON...**

Children are less likely to drop something that they may return to pick up and, while doing so, be run over by their own bus. This happens all too often.

#### **LIFE SAVING TIP #6: "HORN MEANS DANGER -- GO BACK"**

**The bus horn is our state’s “UNIVERSAL DANGER SIGNAL.”** If the bus driver perceives danger while the child is crossing, the horn means “get back to the side of the road you started from.” The horn provides the quickest and most reliable signal in this situation. In an emergency, hand signals could be misinterpreted by the child, or hard to see because of glare or darkness. Outside P.A. systems are not on all buses, and may not work well in very cold weather. Using the PA to alert a child of an approaching vehicle might take too much time, too.

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## **IN THE HOME**

Parents should post the Crossing Poster in the bedroom of young children for continued reinforcement of important safety procedures.

Parents should review school bus safety procedures on a regular basis with their children.

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## **EVERYWHERE**

School bus drivers, teachers and parents should point out the location of the crossing poster and emphasize the safety message on it as often as possible. Until the lesson is learned and the children are able to successfully demonstrate the safety procedures, the message should be repeated as follows:

Weekly for children in grades K-3

Once per month during the first week of each month for grades 4-6

Once as follows for grades 7-12:

1st week of school

2nd week of November

First five school days of January, March, and May

**STRESS TO THE STUDENTS** the importance of looking both ways as they cross the road. Motorists do not always stop for the flashing red lights of stopped school buses. Train children to immediately return to the protection of the bus if they see an approaching vehicle.

**ENCOURAGE ALL STUDENTS, ESPECIALLY THOSE IN GRADES K-3, TO CARRY THEIR BELONGINGS IN A BACKPACK** or totebag (or other type of carrier). A backpack reduces the possibility of a student dropping an object near or under the bus, returning for it, and being run over the bus.

During the bus ride, a single carrying container on a child's lap is more easily controlled than 3 books, 2 drawings, 4 pencils and a lunch bag, etc. Keeping student items together in a backpack is also safer during an accident...less clutter for everyone to work around during an evacuation.

## ROUTING AND DRIVING TIPS

Attempt to route all buses so as to eliminate the need for children to cross in front of the bus during loading or unloading, especially on busy or roads with poor sight-distance.

When children must **cross in front of the bus**, the following procedures are absolutely necessary:

- (a) Identify all “crossers” on the driver’s student list and route sheet. This is critical safety information for the regular driver at the beginning of the school year, and for all substitute drivers during the year.
- (b) Avoid discharging children where they must walk back along the side of the bus. Children could slip and fall under the bus and be run over.
- (c) Teach students the “**UNIVERSAL CROSSING SIGNAL**” for loading and crossing and the “**UNIVERSAL DANGER SIGNAL**” - the horn - to warn them of danger while crossing.
- (d) If parents meet children who must cross the road at the bus stop, encourage them to meet their children **as they exit the bus**. This results in the child crossing the road under parent supervision, which is safer. Be sure parents also follow proper crossing procedures so their children will learn the correct way to cross. Someday the parent won’t be there and the child will have to cross on his or her own.
- (e) When discharging a mix of non-crossers and crossers at a bus stop, discharge the crossers first. Observe their crossing carefully. After all crossers have safely crossed the road, discharge the non-crossers. Because motorists may drive by the exit door, children should look both ways before leaving the stairwell of the bus. After all students are safely away from the bus (remember DMV’s 15 Foot Law), proceed with caution, checking your **OUTSIDE** pedestrian mirrors as you begin to move. It is extremely important to make sure all children are away from the bus **BEFORE** moving forward. Never move the bus if there’s any question that a child isn’t at least 15 feet away. There have been several incidents around the country of drivers closing bus doors on children’s garments or of draw strings getting caught in the door or handrail, and dragging a child down the street. In February, 1996, a New York State student was killed in such an incident. There were also New York State dragging fatalities in the 70’s and 80’s. Many other close calls have been reported. In 2003, a New York preschool child was dragged to his death when his mitten strings were snagged by the bus. And another very close call occurred when a driver shut an elementary-age child's backpack in the bus door and traveled 400' before realizing what he had done.

**NOTE:** By discharging crossers first, waiting motorists are more likely to remain stopped if they see children crossing the road. If non-crossers are discharged first and waiting motorists observe no crossers, they’re more likely to become impatient and pass the bus when children are crossing. Separating crossers and non-crossers puts the school bus driver in a better position to control the discharging students. Bus drivers must also be sure that all students are seated before leaving the bus stop, as well as during the route.

A driver's undivided attention during the complex task of crossing is absolutely critical. Drivers must also monitor motorists very closely during the entire crossing process. Student lives have been saved by drivers who saw "out of control" motorists approaching the bus while students were outside the bus. Drivers must be prepared to communicate with students AT EVERY MOMENT during the crossing procedure, and students must be taught to respond to the driver's warning immediately.

Use these procedures when loading all children, not just crossers:

- (a) Children who are not seated are vulnerable to greater injury in an accident or sudden braking or steering actions. Be sure all children are properly seated before you move the bus.
- (b) Use "MIDDLE LOADING" to keep children out of the front and rear seats whenever possible. Because most accidents involve a bus striking something in front or being struck in the rear, most student passenger fatalities occur in the front or rearmost seats. Use these seats only if the bus is completely full and be sure that they are emptied as soon as possible.
- (c) Drop off all passengers **after** the following maneuvers, not before:
  - 1. Backing the bus.
  - 2. Making a right turn.

Children should always be on board the bus when backing or making a right turn near a bus stop.

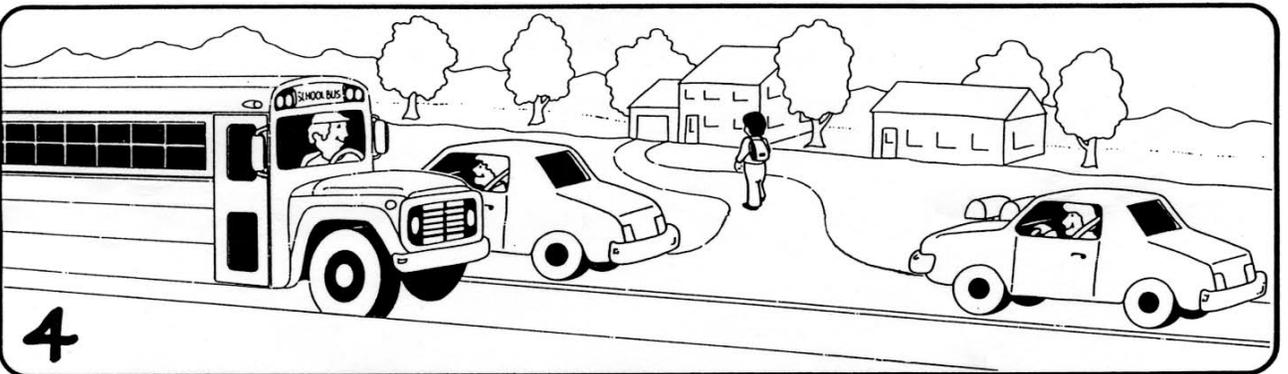
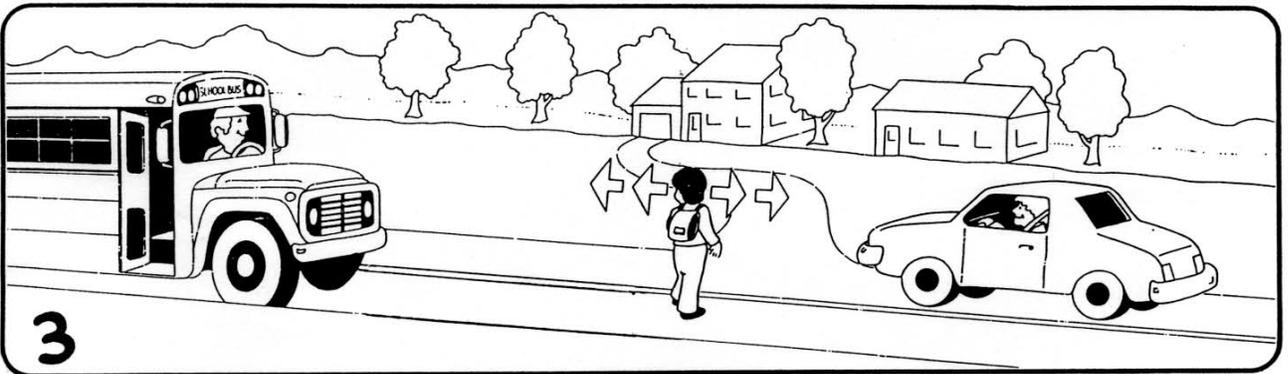
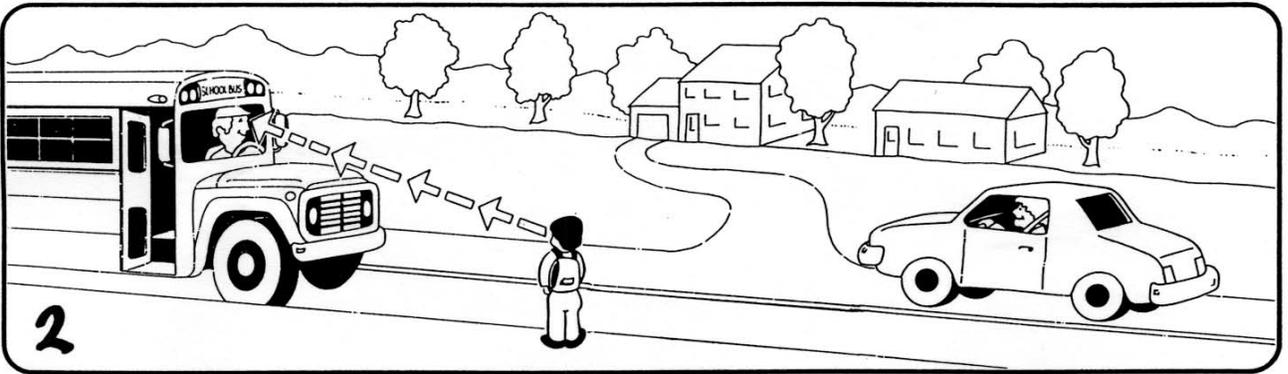
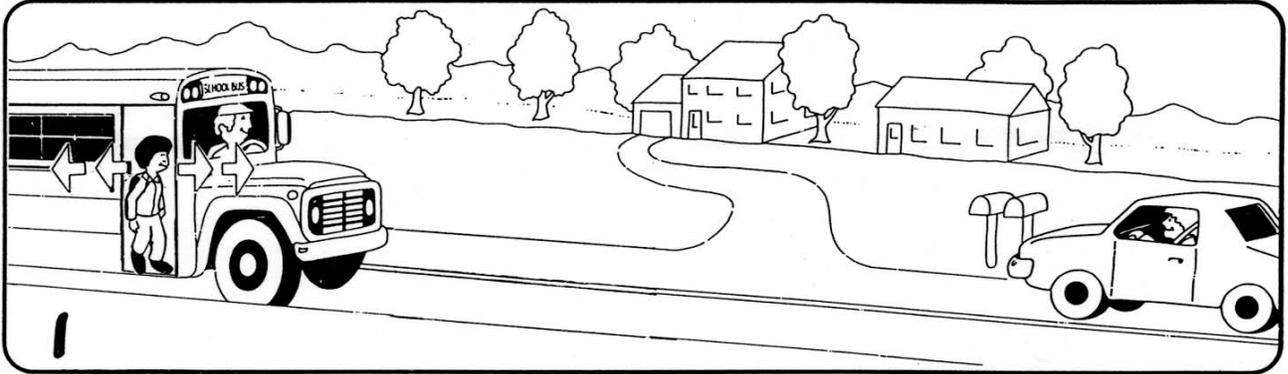
**REMEMBER...CHILDREN OUTSIDE THE BUS ARE 4.5 TIMES MORE VULNERABLE TO BEING KILLED THAN CHILDREN INSIDE THE BUS.**

The most effective and economical safety insurance is that which is purchased with time...time spent to teach children safety procedures, and time required to pay extremely careful attention to children getting on or off your bus, at every single bus stop, every single day.

NOTE: 56% of all school bus fatalities since 1960 occurred when children were run over by their own bus. Driver, parent AND student training, awareness and alertness of this fact are critical to eliminating these tragic incidents. Cooperative programs to educate children, parents, teachers, administrators, board members and motorists are very important.

THANK YOU. New York's children are safer, because of you. "FOR THE CHILDREN"

# HOW TO CROSS SAFELY



# Loading and Unloading Safety

## *NYS Procedures, Tips, and Cautions for School Bus Drivers: 2006-2007*

*Most of these lifesaving safety procedures, tips, and cautions were first developed by school bus drivers. If you have a suggestion to add, use the form at the end of this document.*

### A. STRICTLY ENFORCE SAFE CROSSING PROCEDURES

1. Establish **eye contact** between driver and student: "I See You, You See Me."
2. With **transit-style (flat front) buses**, students should still be trained to walk out at least ten big steps - someday they may ride a conventional style bus again.
3. Use the **New York State Universal Crossing Signal** when it's safe for the child to cross, pointing in the direction you want the child to walk.
4. Drivers and students must follow all safe crossing procedures in the **morning**, too.
5. Teach children the **New York State Universal Danger Signal** so they know what to do if a motorist fails to stop for your stopped bus. If the bus driver honks the horn while the child is crossing, it means "return to the side of the road you started from at once!"
6. When crossing, **students must stop and check for traffic** (looking carefully left, right, left, and listening carefully too) before entering the unprotected lane.
7. Enforce Safe Crossing procedures with **older students** too - don't give up on older students! Safe crossing is a law. And, older students set an example to younger children on the bus.
8. **Don't train discharging students to walk to a set location** before crossing, such as a tree or driveway - a substitute driver may not stop the bus in exactly the same spot, and the students could be confused.
9. On **routes with bus attendants**, children should still be taught to make eye contact with the driver and wait for the driver signal to proceed. The attendant's role is to accompany the crossing child and make sure the correct crossing procedures are followed. The attendant may not be there one day. Young children need to learn how to cross the street on their own.

**"Wait"**



**"Cross"**



*Courtesy of Pupil Transportation Safety Institute*

## **B. COUNT AND RE-COUNT CHILDREN AT EVERY STOP, EVERY DAY**

1. If you've **lost count of a child** who's gotten off your bus, secure the bus, shut it off, take the key with you, get out, and check under and around the bus. Never take a chance!
2. Appoint a **student bus helper** to double-check your student count at each bus stop, from inside the bus. It's still the bus driver's responsibility, but an extra set of eyes can only help.

## **C. ASSUME THE WORST WITH APPROACHING MOTORISTS**

1. Continually **check for approaching traffic** during the entire loading/unloading process.
2. **Keep children inside the bus** until all visible traffic is stopped.
3. Be alert for vehicles (trucks, motorcycles, snowmobiles, bikes) **passing your bus on the right (passenger) side**, or on the shoulder. Train children to "check before they step" off the bus. Strictly enforce this safety procedure.
4. Whenever possible, **let traffic behind the bus pass** before you arrive at the next bus stop. Pull over only in a safe location, and come to a complete stop - don't "troll" along the edge of the road, it's dangerous and illegal. Be very careful when pulling onto a shoulder - watch out for drop-offs, soft shoulders, etc.
5. **Activate yellow school bus flashers** well in advance of the bus stop - two utility poles, or about 300', in residential areas, and further on higher speed roads, roads with limited visibility, during bad weather, or in heavy traffic conditions.
6. Even **emergency vehicles** (police, ambulance, fire) should stop for a school bus stopped with its red school bus flashers activated, but don't assume they will stop. If it's possible to do so safely, abort the loading or unloading process and let the emergency vehicle pass - it's for everyone's good. Funeral processions have been known to drive through school bus flashing lights too - be careful.
7. **Be careful motioning students to their seats** after they've boarded the bus - waiting motorists have mistakenly interpreted this as a signal to proceed past the bus.



## **D. RESIST DISTRACTION DURING LOADING OR UNLOADING**

1. Do not **use the internal overhead mirror** inside the bus while loading or unloading children. Your attention must be focused outside the bus until you're safely away from the bus stop. The internal mirror can be the most dangerous piece of equipment on a bus.
2. Check on **student behavior** and address any problems well ahead of the bus stop. Dealing with onboard behavior problems that occur as children are getting on or off must wait until the bus is safely away from the loading zone.
3. **Silence your onboard students** as you load or unload. Flash dome lights on and off as a signal for silence during critical driving tasks such as loading and unloading.

## **E. STAY ALERT FOR SPECIAL DANGERS**

1. **Kindergarten through third-grade children** are most vulnerable to a loading and unloading accident. Young children are short and harder to see near your bus. They are

2. impulsive and inexperienced in traffic. Be extremely cautious when loading or discharging young children!
3. **Take-home** routes are the most dangerous. Children may be pent-up with energy after school - and bus drivers are tired.
4. **By-own-bus** accidents - children being run over by their own buses - are the most common type of student school bus fatality. Understand the danger and use extreme caution.
5. Beware **spring fever**. The most dangerous months for by-own-bus fatalities are December to May. Children, and bus drivers, may get sloppy about safety procedures after school has been in session for several months. "Pinch yourself!" - remember that an accident can occur in a split-second of inattention.
6. Children **should be on board whenever the bus backs up**. Minimize backing - all backing is dangerous, and especially backing near bus stops. Use a bus attendant or a reliable student as a spotter, from the inside rear of your bus. Back only at approved turnarounds.
7. **At bus stops located near corners, children should be on the bus when the bus turns right**. The rear duals of a bus can "track" over the curb and run over a child on the corner. Pick up children before turns and drop them off after turns.
8. **School loading areas** can be congested and hazardous. Be extremely alert in school bus loops!
9. **Group stops** (at trailer parks, apartment complexes, etc.) can be very challenging - watch out! Train students to wait for the bus in an orderly manner, and insist that discharging children move immediately away from the bus to prearranged spot.
10. Stops with **mixed crossers and non-crossers** can be challenging. The potential for confusion is high. **Discharge crossers first** - then non-crossers. Children who must cross should be clearly indicated on the route sheet.
11. If several students are crossing, they should **cross as a group**. Don't let children straggle across one at a time - it's harder to keep tabs on them, and waiting motorists are more likely to lose patience.
12. Be aware of children carrying **loose papers**. Tell children to keep belongings in a backpack or book bag.
13. Watch out for children's clothing with **dangling straps, drawstrings, or mitten strings**. Bus handrails, doors, even fire-extinguishers mounted near the exit can **snag** loose clothing as children get off the bus. Watch out for children wearing bulky winter coats and hoods - they can't see traffic or other hazards.
14. Be alert for students trying to retrieve an item from the **external luggage compartment** on your bus at school or at a bus stop.
15. **Don't run early or late on your route** - children can become confused, creating a dangerous situation. If the bus is early in the morning, children might chase after it without watching for dangers. If the bus is late, children may become confused and try to board another bus, or get on at another stop. Dangerous situations can result.
16. When **facing another school bus** while loading or unloading children, make eye contact with the other bus driver. Be sure both of you are finished loading or unloading before proceeding.
17. In **heavy fog**, get off the road to a safe area and stop in a safe area. Wait for fog to lift or for further instructions from your supervisor. Use 4-way hazard flashers (and roof-mounted strobe lights if equipped). If you encounter dense fog approaching a bus stop and are worried



that traffic behind you may not stop for your stopped bus, you might need to go past the stop. Train children ahead of time to wait well back from the roadway, especially in foggy conditions. Explain that they should go back inside or wait in a safe area until conditions have improved if their bus goes past the stop. Always alert base by radio, at once, if you can't make a stop for any reason.

18. Be alert for **pranks at bus stops the last week of school** (water fights, jumping out of bus exits, etc.) - don't let yourself become rattled, children have been run over in the chaos. Report any rumor about planned pranks to your supervisor ahead of time.

## F. CORRECTLY ADJUST MIRRORS ON EACH BUS DRIVEN EACH DAY

1. **Checking mirror adjustment** is one of the most important parts of a pre-check. Never drive a bus whose mirrors are out of adjustment. It is against the law, and dangerous to children.
2. Are you sure your mirrors show you what they should according to state and federal regulations? Ask for assistance from a mechanic, trainer, or supervisor. **Front pedestrian (crossover) mirrors should show a seated bus driver the entire area in front of the bus hidden by the bus hood**, from the front bumper forward to where direct vision of the ground is possible.
3. **Check both pedestrian (crossover) and driving mirrors for children in or near the danger zones just before resuming forward motion**, and keep checking driving mirrors as you pull slowly forward to watch for children running up to the bus from any direction.
4. Pull away from the bus stop at **low (idle) speed** so you can stop quickly if a child suddenly appears near your bus.
5. **Mirrors can be deceptive** - force yourself to search mirrors slowly and carefully. Quick glances can easily miss a child. Search for children who have tripped and are lying on the ground, not just for children standing up; search for children wearing dark or low-contrast clothing.
6. Mirrors create **blindspots**. Move in the bus seat to "look around" mirrors before moving forward. Don't check mirrors only while leaning over to close the bus door. Your view into the mirrors is distorted. You could fail to see a child.



## G. RESIST THE TEMPTATION TO RUSH

1. Driver rushing has been a factor in many school bus accidents - including **by-own-bus fatalities**.
2. Remember: **"One bus stop at a time."** Focus on what's happening as you load and unload children at the stop you're at. Keep other thoughts and concerns out of your mind at this "moment of truth."
3. **Focus and concentration are the signs of a professional**. If you are worrying about personal problems or thinking about errands you need to do after work, you can't load and unload children safely.
4. **Report unrealistic route times** to your supervisor, or your School Bus Driver Instructor (SBDI). Don't give in to unrealistic time pressures on your route. "Safety first, schedule second."

5. **Never move the bus if children are within 15' on any side.** It's against the law and very dangerous. Don't allow students to walk back along the side of the bus.
6. **If you miss a stop by mistake, never back up** - go around the block, even if it's a long one. Alert base by radio. Backing is dangerous - especially near a bus stop. You could easily back over a child.
7. **Substitute drivers** must avoid rushing too. If a sub starts a route late, he or she should finish it late. Trying to "make up time" while driving a school bus is a recipe for tragedy.
8. Rushing doesn't just mean breaking the speed limit - **in a school bus you can rush at 20 mph.** Rushing means you're not being alert to potential dangers around your vehicle.

## H. UNDERSTAND ROUTE AND BUS STOP SAFETY

1. **Never change the location of a bus stop (pick-up or drop-off)** without approval from your supervisor. Personal liability could result if a child was hurt and it was proven you had changed the location of the bus stop. Never alter your route without official approval!
2. If a child is waiting for your bus on the **wrong side of the road, or at an unapproved stop**, pick the child up that day as safely as you can, but alert base by radio and talk to your supervisor about the situation as soon as you return to base. Use good judgment and keep children's safety foremost when unexpected situations arise on your route.
3. You are the eyes and ears of the transportation department. **Report any unusual hazards**, such as dangerous cross-overs, to your supervisor.
4. When loading or unloading children, stop your bus **toward the right of the driving lane, positioned straight ahead and not at an angle - try not to leave more than 18" of driving lane on the right side** of your bus. This makes it harder for a vehicle to pass your bus on the right side.
5. Under normal circumstances, **don't pull onto a shoulder** when loading or unloading children - however, if a wide shoulder or a bike lane is present at a bus stop, you may need to stop your bus more to the right. According to NYS DMV, it's not against the law to stop a school bus on the shoulder of a highway (other than an interstate highway) when picking up or discharging passengers. Every bus stop is unique. Ask your supervisor or SBDI for guidance.
6. In the morning, stop your bus **before pulling right next to students waiting for your bus.** Make students walk to your bus - it's safer. Pulling up next to children could result in a tragedy in slippery weather or if a child moves suddenly into the road. Train waiting children to wait until your bus is fully stopped, and until you signal them it's safe, before moving towards your bus.
7. **Bus stops on corners can be confusing to motorists** entering a road from an intersecting road. Work with your supervisor to place bus stops safely back from intersections whenever possible.
8. **Train yourself to search for unusual hazards as you approach each bus stop** - criminal activity, strangers, dogs, cars backing from driveways, construction equipment, snow banks, etc. You can't be too careful today.



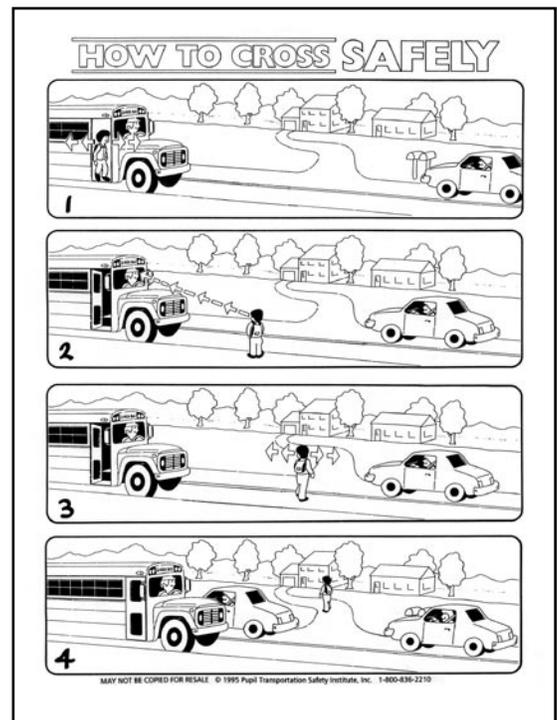
## I. USE SAFETY EQUIPMENT PROFESSIONALLY

1. **Secure your bus at every bus stop**, whether one child or 10 children are assigned to that stop. Set the parking or emergency brake regardless of whether you're driving a bus with automatic or standard transmission, air or hydraulic brakes.

2. **Let your foot rest lightly on the service (foot) brake** while your bus is stopped to load or unload children. Brake lights help wake up approaching motorists.
3. When ready to resume forward motion after children have gotten on or off, **take special care that the transmission is in “Drive”** before releasing the emergency or parking brake. You don’t want your bus to roll back.
4. **Never move your bus with its door open and the red school bus flashers activated.** It’s illegal and confusing to motorists.
5. **When it’s dark, use your dome lights** if you must cross children (for instance, early in the morning during the winter). The Universal Crossing signal may be more visible to children outside the bus. However, be careful that dome lights don’t create glare that makes it even harder to see.
6. If your bus is equipped with an **external P.A. system**, use it to supplement the Universal Crossing hand signal when crossing students, but not to replace it. Equipment can always break down. A spare bus might not be equipped with a P.A. system. Children need to be constantly reminded about the Universal Crossing signal.
7. If your bus is equipped with a **crossing gate**, think of it mainly as a training tool for children. Don’t rely on crossing gates to keep children away from the bus. No piece of safety equipment is foolproof. Children are unpredictable. Don’t use a bus equipped with a crossing gate (or any other piece of safety equipment, required or optional) if it’s not in working order.
8. Check frequently to make sure your **Master Switch is activated and your school bus flashers are working** during the route. Check your “pilot” light next to the Master Switch, or your stop arm, to make sure they’re working. Double-check the Master Switch after crossing railroad tracks, to make sure you’ve reactivated it.
9. **The most important piece of safety equipment** on a bus is a professional, alert, caring school bus driver.

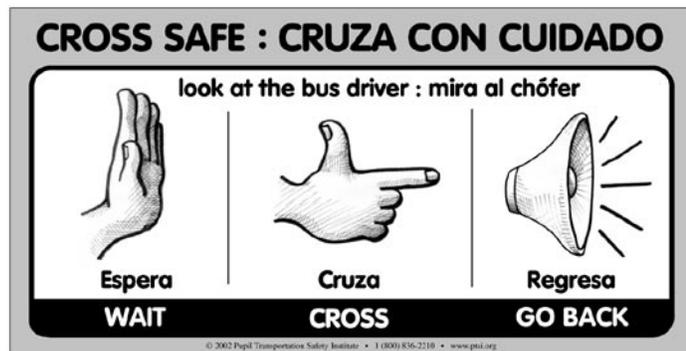
## J. EDUCATE CHILDREN

1. Children learn by repetition, repetition, repetition! **Remind kids about safe crossing procedures every time they get off your bus.** You don’t need to give them a speech, but say something every day that will keep safety in the forefront of their minds as they exit the bus. Daily instruction of children who must cross the road is a law - and a good one! Daily reminders save children’s lives.
2. Stress to children that they should **never return if they drop something near or under the bus.** However, be prepared for the unexpected - children may do so anyway. Training is very important, but children will always be unpredictable.
3. Use **bus safety drills** to test students’ mastery of loading and unloading procedures. Conduct drills in an isolated section of a parking lot so you can let students practice crossing procedures safely. Ask your supervisor or SBDI for help.



4. **Crossing children must be crystal-clear about what driver signals mean.** A single moment of confusion could cost a child's life if a car is speeding toward your bus. Teach children to check carefully for traffic before crossing, and to return to the safe curb if you sound the horn ("Universal Danger Signal")..
5. Teach children they must **ignore grandparents, parents, or friends while crossing** in front of the bus. A distracted child could run across the road without waiting for the driver signal and be struck by a passing motorist - it's happened. If parents or grandparents don't understand the safety reason for this, ask your supervisor to give them a courtesy call.
6. Teach children **not to place too much faith in red school bus flashers.** Remind children that the road is a dangerous place, and that cars **will** drive by the bus!
7. Train students to **wait for the bus safely back from the road, in an orderly line.** Many school bus drivers have been very successful at teaching children to wait in an orderly fashion.
8. Teach children about **mail box dangers.** Don't let students stand at the mail box right next to the road as your bus pulls away from the stop. Don't let them run across the street behind your bus to pick up the mail. If their parents permit it, children can get the mail after the bus has left the area.
9. The **State Education Department's "How To Cross Safely" poster** should be mounted in every New York State school bus. Make sure there's one in your bus. But safety posters don't do anything unless bus drivers use them as teaching tools on a regular basis.
10. **Coloring books, stickers, certificates, buttons, etc.** are great ways to reinforce safe crossing procedures with younger kids.

11. All kindergarten children should view the State Education Department's "**Safe Crossing: an 'Egg-Cellent' Idea**" training video. The video teaches children critical safety procedures such as how to get on and off a bus, how to cross the road in front of the bus, what the "Universal Crossing" and "Universal Danger" Signals are, what to do if they drop an item near the bus, etc.



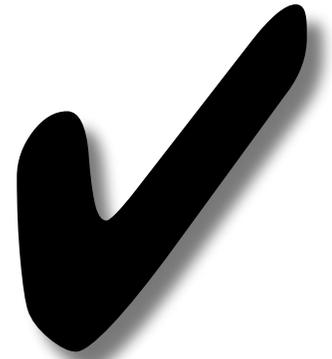
All school districts and bus companies should already have a copy of this video, or new copies can be purchased for a small amount from PTSI.

12. **Driver-in-the-Classroom bus safety programs** to reinforce loading and unloading safety make a big difference. Many wonderful New York State school bus drivers have volunteered to offer safety training to children in the classroom. If your school system doesn't have a "driver-in-the-classroom" program yet, talk to your supervisor or SBDI about what it would take to get one going.

## K. ALWAYS EXPECT THE UNEXPECTED FROM CHILDREN

1. **Err on the side of caution - trust your intuition.** Children's lives have been saved when bus drivers "just didn't feel right" and checked under their buses. Young children will do almost anything around a bus. Children have crawled under buses, crawled into wheel wells, climbed on bumpers, played with crossing gates, grabbed hold of mirrors, etc. In some of these incidents, an attentive bus driver discovered the child; in others, the child was run over by the bus and killed.

2. Watch out for **children running after a bus they missed** as it pulls away from the bus stop. If a child isn't at the bus stop in the morning, be especially careful as you pull away. The child may be late and could chase after the bus. Check the surrounding area carefully before you pull away.
3. Be alert for **parents following your bus in their own cars** to catch the bus at a later stop - or even at a traffic light! Children could run up to the bus door unexpectedly, just as you pull away.
4. Watch out for **students slipping off the bus while you are focused on crossers outside the bus**. Don't leave the door fully open - just "crack" it enough to keep the red school bus flashers activated. With air doors, place your right arm across the aisle to keep children from going out the door.
5. Watch out for a **student on the bus signaling to a motorist outside to proceed past the school bus flashers** - it's actually happened!
6. Be alert for **unsupervised younger brothers and sisters near a bus stop**. Tragedies have occurred when preschool children have rushed to meet an older brother or sister getting off the bus. Report to your supervisor or an SBDI any unsupervised children playing at or near a bus stop.
7. **Snow banks** near bus stops can be dangerous. Check carefully for kids playing or climbing on snow banks, or hiding behind them. Never discharge a child directly into a snowbank or any other unsafe situation.
8. Be alert for **last-second warnings from others** just before moving your bus away from a bus stop - from other motorists, other bus drivers, parents or teachers outside the bus, or even children on board your bus. Someone might have seen a child under or near your bus. Take warnings seriously.
9. **Silence students and turn the am-fm radio down at each bus stop**, so you can hear warnings. It's also a good idea to open the driver window at busstop, to hear better.
10. **If no one is home to receive a young child or a child with special needs**, radio base and ask for guidance before proceeding. Know your school or company policy about dropping young children off. Never force a child off the bus who seems frightened or confused. Ask base what you should do.



## L. USE MIDDLE LOADING WHENEVER POSSIBLE

1. In the morning, **keep children out of the rear and front seats** until all other seats are filled. In the afternoon, empty the rear and front seats first. Train children to fill the middle seats first. Children in rear and front seats may be more vulnerable to injury in certain types of severe collisions.
2. **Middle loading saves lives**. It has been recommended by the State Education Department for many years.
3. Middle loading is especially important on bus routes with **high speed truck traffic**.
4. **Teach children why** you don't want them in the back or front seats if the bus isn't full.

## M. LISTEN TO CHILDREN

1. **Don't force children off the bus if they tell you they should get off someplace else** - they may be pulling your leg, or they may be telling the truth. Always use your radio to check with base when unexpected situations arise on a route.
2. Train children to **remind the bus driver every day if they have to cross** the road after getting off the bus. Getting children involved like this helps them remember safety procedures. **Substitute drivers** really benefit from this tip!
3. **If children say there's a problem, take it seriously.** Maybe they're joking - maybe not. Tragedies have occurred when drivers ignored children's warnings.

## N. EDUCATE PARENTS AND TEACHERS

1. Explain the **importance of bookbags or backpacks** to parents and teachers. Bookbags and backpacks reduce the chance that a child will drop an item near the bus. Some drivers carry plastic grocery bags on the bus for kids who have forgotten their bookbags.
2. Explain the **danger of dangling drawstrings, straps, or mitten strings** to parents. Parents should buy coats and sweatshirts with short drawstrings.
3. **Large, distracting, or fragile items** should not be carried on the bus. Parents should bring such items to school. Children's safety is more important than parents' convenience.
4. **Encourage parents to reinforce loading and unloading safety procedures at home.** For instance, parents of very young children can practice the crossing procedure in the driveway using the family car. Parent training is a huge help! Give parents copies of the "How to Cross Safely" poster.
5. **Seek parent and school assistance in reinforcing safe behavior on bus.** Parents can be powerful safety allies. Help parents understand how student behavior problems could distract the bus driver and result in a tragedy.
6. Regularly remind your school and the whole community about the importance of never passing a stopped school bus. Take part in the annual "**Operation Safe Stop**" campaign in your area - its goal is to remind the public to stop for school buses. Work with Parent-Teacher Associations, civic associations, law enforcement, and local media to develop ongoing educational campaigns. Place posters in local stores, churches, and offices. Write a letter to the editor about the importance of stopping for school buses. Ask local politicians and Traffic Safety Boards to help remind the public to stop for stopped school buses.



# Highway-Rail Crossing Safety

## *NYS Procedures, Tips, and Cautions for School Bus Drivers: 2006-2007*

*The worst school bus accident in New York State occurred March 24, 1972 in Congers, Rockland County. Five children were killed. These procedures, tips, and cautions for school bus drivers are dedicated to those who lost their lives in the Congers tragedy, and to their families and community. If you have suggestions to add to this list, send in the form at the end of this document.*

### A. KNOW YOUR BUS

1. Any vehicle transporting school children in New York State is a “school bus” and must stop at all tracks and follow all highway-rail crossing safety procedures. This includes **small vehicles being used as school buses**, such as Suburbans, vans, and school cars. Be very careful when stopping at railroad tracks in a small “non-yellow” school vehicle, as other motorists may not expect you to stop.
2. School buses **with or without passengers must stop at railroad tracks** in New York State.
3. **Know the length of your bus.** You must know if your bus will fit safely on the other side of the tracks, or between multiple tracks. Some operations indicate the specific length (and height and weight) of the bus on a card taped to the dash of each bus.
4. Be aware of **blind spots** on your bus (mirrors, structural posts and pillars, fans, etc.) which could prevent you from seeing an approaching train. Compensate for “view obstructions” on your bus by “rocking before you roll” across railroad tracks.
5. Learn how to use “**Reference Points**” on your bus to know how far you are from the tracks. You should be able to accurately determine the distance both in front of and behind your bus. Because drivers are not all the same height, and because there are many different designs and styles of buses, reference points must be determined for each individual bus. Learning to use reference points is simple. Ask your trainer or School Bus Driver Instructor (SBDI) to teach you how to establish reference points on your bus.

### B. KNOW THE ROUTE

1. Before you leave on a **field trip or on an unfamiliar route**, find out about highway-rail crossings you will encounter. Talk to other drivers who have driven to that destination before, or to your supervisor or SBDI, about any unique features about railroad crossings you will encounter, and any safety tips they can share.
2. **Highway-rail crossings should be clearly noted on all route sheets.** Being a substitute driver is a difficult job. If you are a sub, check the route sheet ahead of time for any highway-rail crossings. Whenever possible, talk to the regular driver about the highway-rail crossings on the route you will be driving. Ask ahead of time about any unusual or challenging features.
3. Learn the train schedules for crossings on your route, but remember that trains are often off schedule. Unscheduled freight trains could come at any time, from either direction. **“Any time is train time.”**

*Courtesy of Pupil Transportation Safety Institute*

## C. PREPARE TO MAKE THE STOP

1. Well before you arrive at a crossing, **check traffic behind you**. Are vehicles following your bus too closely? Are there large vehicles behind your bus which might be able to push your bus onto the tracks? Be especially careful when driving a small non-yellow school vehicle.
2. **Activate your 4-way hazard flashers** early enough to alert vehicles behind you. Turn on your 4-way flashers at least 200' before the tracks in town, and at least 300' or more on higher speed roads. If necessary, **tap your brakes lightly** to “wake up” motorists behind your bus. Do **NOT** use either your red or yellow school bus flashers approaching or when stopped at railroad tracks. School bus flashers are for passenger loading and unloading **only**. Train yourself to turn off your school bus flasher master switch at the same time you turn your 4-way hazard flashers on. Link the two actions together to avoid accidentally activating your school bus flashers when you open the door after stopping at the tracks.
3. **If possible, collect traffic behind your bus** as you approach a railroad crossing. By slowing down well before the tracks, vehicles behind your bus will also be forced to slow down, preparing them for your stop. This tip is especially important when driving a smaller school vehicle or school car which is not yellow. Other motorists may not be expecting you to stop.
4. As you approach a crossing **on multi-lane roads, move to the right lane**. Stop at the tracks in the right lane so other traffic can go around your bus on the left. Do not pull clear off the road onto the shoulder, though - stay in the driving lane. If you must be in the left lane in order to make a left turn immediately after crossing the tracks, take extra care to alert traffic behind you that you are going to stop at the tracks. Vehicles in the left lane are often traveling faster and may be less prepared to stop.
5. **Quiet your students, and turn off the am-fm radio, fans and heaters** before you get to the stop. If your bus is equipped with a “Noise Kill” switch, use it. Hearing a train is impossible in a noisy bus. Teach your students to be quiet at every set of tracks. Explain why it’s important. Some school districts and bus companies teach children a standard signal for “silence, please - right now,” such as blinking the dome lights on or off or raising their hand in a “V” signal. Report students who refuse to cooperate.

## D. STOP

1. Always stop your bus **15 to 50 feet from the nearest rail**. Stop with or without passengers on board. Stop at the point between 15 and 50 feet that gives you the **best visibility** down the tracks in both directions. If there’s a stop line on the roadway, stop before it. Do not stop past a warning gate (unless you must make a second stop to improve your view down the tracks before crossing - see VISIBILITY PROBLEMS, below. In such a case, **never stop closer than 6 feet from the closest track**.)
2. **Check again for traffic** behind the bus after you’ve come to a stop. Stay alert for a vehicle closing on your bus at high speed. Leave your 4-way flashers on.
3. Always make a full and complete stop at the crossing. **Never make a “rolling stop”** even at tracks that are seldom used. Do not allow yourself to be rushed in any way at highway-rail crossings. Being in a hurry is incompatible with school bus safety.
4. **Never stop your bus on the tracks**, or in the danger zone within 6' of the tracks, **for any reason**.

## E. CHECK FOR TRAINS AND CLEARANCE ACROSS THE TRACKS

1. Double-check to make sure your **school bus flasher master switch is off** before opening the bus door.
2. After the bus is stopped, **open the driver's window and entrance door**. Opening the window and door helps you hear and see better. Open the door at all crossings. Opening the door at railroad tracks is a recommendation of the State Education Department, the Department of Motor Vehicles, the Federal Railroad Administration, Operation Lifesaver, the National Safety Council, and the Pupil Transportation Safety Institute. If you are driving a small school vehicle such as a school car or suburban, don't try to open a passenger door or your driver door - just open the driver's window and listen carefully.
3. **Look and listen carefully for trains in both directions**. Search carefully in both directions down the track more than once. Avoid complacency! Unless you remain alert and fully aware of the potential danger at every crossing, it's possible to turn your head back and forth without really seeing anything! Because trains approach from a fixed angle, it's easy to miss them unless you look directly and carefully in their direction. Even though trains are very large, the field of vision they take up as they approach is small.
4. Move actively in your seat to be sure a train isn't hidden in a blind spot on your bus - always **"rock before you roll."**
5. Check the status of **all warning signals** (flashing lights, bells, gates) at the crossing before beginning to cross. Warning signals are designed to alert motorists that a train is approaching well before it is visible. The flashing lights and bells should activate at least 20 seconds before the train arrives at the crossing. Don't make the mistake of only checking for trains that are visible. Tip: watch the crossing gate on the opposite side of the road for signal activation as you proceed across the tracks - you can't see the one you've already passed!
6. Be sure there is **adequate clearance across the tracks** before beginning to cross. You should be able to stop far enough past the tracks to allow 15' safe clearance behind your bus. If you're not absolutely certain your bus will fit in the available space across the tracks, don't commit. Don't begin to cross if traffic on the other side of the tracks is still in the process of clearing out the available space - a vehicle could stall or stop suddenly for some other reason, and your bus could be stuck on the tracks.
7. If you see or hear a train while stopped at a safe distance from the tracks, or the flashing lights, bells, or gates activate, **secure the bus (set the parking brake)**. Leave your foot resting lightly on the service brake pedal so motorists will still see brake lights and realize you aren't moving forward. Once you are sure all traffic is stopped behind you, remove your foot.
8. Once a train has passed and completely cleared the crossing, **repeat the process of silencing the bus and carefully checking for trains before proceeding**. A second train could be closely behind the first - never proceed across the tracks as soon as one train has passed.

## F. CROSS THE TRACKS

1. **If you are certain the tracks are clear in both directions, and warning signals do not indicate an approaching train, close the door and proceed quickly across the tracks**. Don't move the bus with the door open. Once you have made an informed and considered decision to cross, don't hesitate. Indecision at this point could expose your bus to more danger.
2. In a bus with standard transmission, **don't shift gears while crossing the tracks**. It's against the law. In buses with automatic transmissions, there is **no need to manually downshift** be-

fore crossing. Use “Drive” as you normally would when starting up from any stop. Attempting unfamiliar procedures increases the risk of a mistake.

3. **Do not dawdle crossing the tracks.** Even though tracks can be bumpy for your passengers, do not go so slow that you expose them to danger any longer than necessary. (When transporting children with special medical conditions, extra caution may be necessary to avoid injuring them on bumpy tracks.)
4. If the **warning signals (flashing lights, bells, or gates) activate just as you begin to cross, continue quickly across** unless a train is obviously bearing down on the crossing. Warning signals should activate when the train is about 20 seconds from the crossing. This is ample time to cross the tracks and out of harm’s way. Panic or indecision at this point could be deadly - move quickly across the tracks. Don’t try to back up - it could take too long, or another vehicle behind the bus could trap you on the tracks. If you’ve already stopped and carefully checked for trains, you are not breaking the law to continue across at this point. It’s the safest thing to do. If the crossing gate comes down on top of your bus as you are going across, keep going. The gates are designed to break. If a gate does strike your bus as you cross, stop in a safe location after crossing and contact base by radio for guidance.

## G. LEAVING THE CROSSING

1. After crossing tracks, **leave your four-way hazard flashers on until your bus has resumed “road speed”** for that particular area. **Don’t** turn them off as soon as you’ve cleared the tracks. Your bus still represents a hazard until it has reached the speed of other traffic in the area.
2. **Turn off your four-way hazard flashers and turn back on your school bus flasher master switch.** Link the two actions together - turning off the four-way hazard flashers and turning on the school bus master switch at the same time - to make it easier to remember. Forgetting to turn the master switch back on could be a serious safety problem at the next bus stop. Train yourself to double-check your master switch to make sure it’s “on” as you approach the first bus stop after crossing railroad tracks. You should periodically check to make sure your school bus flashers are working along the route.

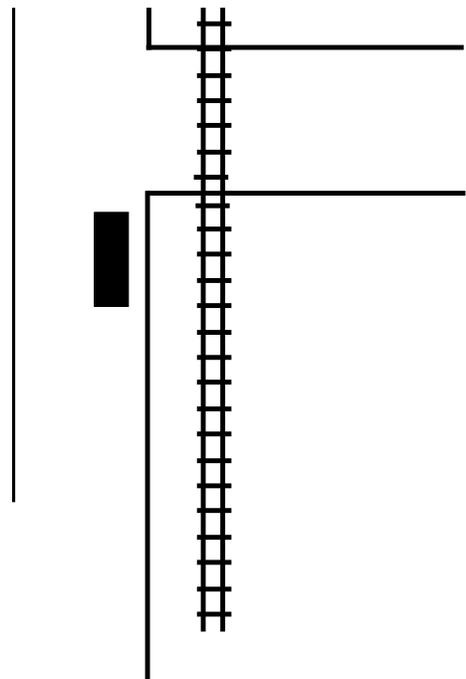
## H. AT MULTIPLE TRACKS

1. Multiple tracks can be more dangerous than single tracks. After one train has passed, a train on another set of tracks could be approaching. **It could be hidden behind the first train.** Be very careful.
2. If multiple tracks are close together, without room to stop safely between them, and not guarded by separate warning signals (lights, bell, or gates), **only one stop should be made before proceeding.** Stop, look, and listen carefully just as at a single track. Check very, very carefully in both directions.
3. **If you are sure there is adequate room to stop your bus between multiple tracks, you should stop at each set** and perform another careful check for trains. Be sure there is room both in front of and behind your bus. Both the front and rear of your bus should be at least 15’ from the nearest rail. Be aware of vehicles behind your bus that may not be expecting you to stop at the next set of tracks - leave your four-way hazard flashers on.
4. **Check for clearance across all sets of tracks.** Do not proceed onto a multi-track crossing unless you are absolutely sure you can cross **all** the tracks without stopping for any reason. If traffic ahead of your bus is lined up and beginning to move across the tracks, wait until all vehicles are off all sets of tracks before beginning to cross.

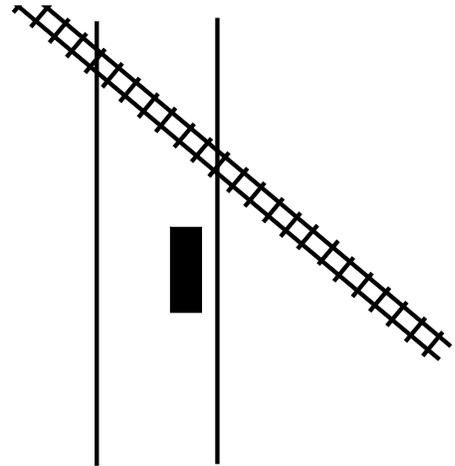
5. If a train is passing at a multi-track crossing, **wait until it's approximately 1000' or 15 seconds beyond the crossing and you are certain it's not hiding another train approaching on another track** before proceeding. After one train has passed, repeat the complete process of silencing the bus and carefully looking and listening for trains before proceeding. Don't be in a hurry.

## I. VISIBILITY PROBLEMS AT CROSSINGS

1. Although federal and state agencies recommend that highway-rail crossings have 1000' of visibility down the tracks in both directions, **many crossings have limited visibility in one or both directions**. The view can be blocked by buildings, signs, trees or brush, signal boxes, railroad equipment, or because of the angle at which the tracks intersect the roadway. Visibility problems can represent a serious challenge to the school bus driver who must cross tracks with a bus load of children.
2. If there are visibility problems at a highway-rail crossing you must use, **ask your supervisor or SBDI to help determine the safest possible strategy for that particular crossing**. Each challenging crossing is unique, requiring its own specific strategy about exactly where to stop the bus for best visibility, etc. A team approach is the best way to figure out the safest possible strategy. Involve local law enforcement, railroad safety personnel, NYS DOT, and Operation Lifesaver. Visit the crossing in a school bus.
3. Find out local train schedules, and arrange to **observe a train at the challenging crossing**. Observing a train gives you an idea of how quickly the train closes on the intersection, where it will first become visible from the bus driver's seat, and how much time it takes from the moment the train is first visible to when it reaches the crossing. (But...never assume that trains will always be on schedule. Unscheduled or late trains could arrive at any time.)
4. In some cases the railroad can improve visibility by **cutting trees or brush, or moving or removing other obstructions**.
5. In some cases it may be necessary to make a **second stop**, after your initial mandatory stop between 15 and 50', to increase your view down the tracks at a crossing with severe visibility problems. If the second stop is past the warning gate, the gate could come down on your bus if the signals activate. Other vehicles that don't expect you to make a second stop could run into the back of your bus. Discuss the entire scenario step-by-step ahead of time with your supervisor and SBDI to work out the details of the safest possible strategy for the crossing, and to clarify any confusions.
6. No matter what strategy you devise with your supervisor and SBDI, **never, never, never stop your bus within the danger zone - 6' or closer to the nearest rail**. Loosened shipping materials on a train can stick out several feet from the tracks, or you could be bumped from behind and knocked into harm's way if you're closer than that.



7. **Making a turn across tracks from a parallel road:** if you have to make a right turn directly across tracks from a road running parallel to them, be very careful. It's hard to see back down the tracks when your bus is parallel to them, and it may be difficult to determine if there is adequate clearance on the other side of the tracks. You may need to look back through the second, third, or fourth passenger window to see down the tracks. Talk with your supervisor or SBDI about ways you could re-route to avoid such a challenging situation. For instance, a **left** turn over parallel tracks usually allows the bus driver better visibility. If you must turn right to cross tracks from a road running parallel to them, try to position your bus at an angle before the turn to increase your view back down the tracks. You may also be able to use your west coast mirror to look back down the tracks. Students might also help you check back down the tracks for trains - of course, safety is still the driver's ultimate responsibility. Ask students to wipe windows clear of steam and condensation to help you see. Turn off your four-way hazard flashers and activate your turn signal once traffic is completely stopped behind you before making the turn, so other motorists will understand your intentions.
8. **Sharply angled crossings:** when the tracks and the roadway don't intersect at or near a right angle, it can be difficult to see down the tracks in one direction. Because of the angle, your bus also has to travel a slightly greater distance to be entirely across the tracks. Work out a specific strategy for the crossing with the input of your supervisor and SBDI. Determine the best position to stop your bus and best way to use your mirrors during practice runs without students on board. Learn exactly which set of bus windows to look through to maximize your view down the tracks. Appoint reliable students to keep those windows free of steam when it's cold outside, and to help you check back down the tracks.
9. Explain specific crossing strategies for challenging crossings to **substitute drivers**. Summarize or diagram the strategy on route sheets for subs.



## J. UNDERSTAND RAILROAD EQUIPMENT AND SIGNALS

1. Passenger trains travel at speeds up to **120 mph**. **At this speed, a train travels 1000' in just 6 seconds.** Tracks carrying high speed trains may be marked with "High Speed Trains" warning signs. Ask your supervisor or SBDI to check with DOT or the railroad company, or to access the Federal Railroad Authority crossing database web site, to find out maximum train speed at any crossing you use.
2. Because of their large size, **trains often appear to be moving much slower than they really are.** It's even harder to judge a train's speed at night. If you can see a train, wait. Never take a chance. Hundreds of motorists across the country are killed each year when they try to "beat the train" across the tracks.
3. An average size **freight train takes about 1 1/2 miles and two minutes to stop.** Don't expect a train to be able to stop for your bus - it can't.
4. **"Crossbucks"** signs, which are placed at every public highway-rail crossing, usually include an **identification number** on the signpost or signal box. Use this identification number when contacting the railroad company about the crossing.
5. **Flashing lights, bells, and gates:** if any of the active warning devices at the crossing (lights,

bells, and gates) engage when you are stopped at the tracks, stay put and wait for the train to pass. **If warning signals engage after you have already started to cross the tracks after carefully checking for trains, proceed across without delay.** If the crossing gate strikes the top of your bus while you are proceeding across, keep going. It will not damage your bus - it's designed to break. Never stop or try to back up at this critical point. Other vehicles could be behind your bus. Get across the tracks as quickly as you can. (Note: flashing warning lights can be difficult to see in bright sunlight or when you're too close to them. Warning lights at crossings are usually low-wattage, powered by batteries. Check their status very carefully.)

6. **Listen carefully for train horns:** a train should sound its whistle four times, commencing about 1300' from the crossing. It can be hard to hear a train whistle in a noisy bus, especially over a the sound of a diesel engine. Always silence your bus at crossings. If you think you hear a train horn or whistle, stay put if you're in a safe location.
7. **Traffic light at a crossing:** if a traffic light controls a crossing, and it is lit green, state law does not require school buses to stop for the tracks. You may proceed with caution, searching for trains in both directions as you approach the crossing. If you feel you must stop to check for a possible train or because you're not sure if the traffic light controls the crossing, be careful to alert motorists behind your bus. They won't be expecting your stop. Tap your brake lights and activate your 4-way flashers well in advance.
8. **"Exempt" signs** mean either that a crossing is no longer in use, or will only be utilized by trains with a flagperson to direct traffic. School buses are not required to stop at exempt crossings and may proceed with caution. If you feel you must stop in a particular situation, be very careful to alert motorists behind your bus. They won't be expecting you to stop.
9. **Dead tracks** are tracks which are no longer in use. The rails may be pulled up on both sides of the crossing. A stop is still legally required unless an "Exempt" sign is posted, but be very careful - vehicles behind your bus may not expect you to stop. Ask your supervisor or SBDI to contact DOT about placing an "Exempt" sign at any dead tracks you cross, or having them removed.



**Domed crossing**

10. **Domed crossings** are elevated above the level of the roadway. They can be challenging for large vehicles such as school buses. The angle of approach, breakover, and departure can be so steep that a vehicle gets stuck on the tracks, or strikes its front or rear bumper in the roadway. If you must use such tracks, it might be necessary to cross at a slight angle to avoid hanging up on the tracks. When crossing a domed crossing in a smaller bus, you may have difficulty seeing across the tracks to make sure there's sufficient clearance on the other side. It may also be hard to see down the tracks or to tell how many tracks there are. The number of tracks should be posted on the crossbuck signpost.

## **K. PREPARE FOR THE UNEXPECTED**

1. **Bad weather reduces visibility** and can mask the sound of an approaching train. Use extra caution when crossing tracks in snow, rain, or fog. Make sure your students are absolutely quiet.
2. **Highway-rail crossing signals can occasionally malfunction, or be vandalized.** Although modern crossing signals are well-designed and carefully checked, **don't assume** that flashing lights, bells, or gates are functioning properly or timed correctly. It is the school bus driver's responsibility to make sure no train is approaching. Vigilant school bus drivers are the ultimate defense against a bus-train tragedy.

3. **If a crossing gate is down or if flashing lights or bells are activated, but no train is in sight, radio your dispatcher.** Never go around lowered gates unless a police officer at the crossing directs you across. Don't ask a bus attendant or student to go out and check the tracks for trains. It may take some time for police or the railroad company to respond to problems at a crossing, but school bus drivers cannot take the responsibility for crossing on their own, even if other motorists are doing so.
4. **Train stopped near the crossing:** a train may be stopped near the crossing, close enough to trip the warning signals. Law enforcement and the railroad company should be contacted. If this is a recurring problem, your supervisor or SBDI should work with the railroad, DOT, and Operation Lifesaver to correct the situation.
5. **If your bus stalls on the tracks, evacuate your students at once,** even if no train is visible. If an approaching train is visible, perform a front/rear dual evacuation to empty the bus as quickly as possible. Teach students to move away from the tracks as quickly as possible - in the general direction from which the train is coming. The reason to evacuate in that direction is that debris from a crash (or the bus itself) could fly ahead of the impact point in the direction the train is going.
6. **If your bus is stuck on a crossing because other vehicles are in the way, use any means to get it off the tracks.** Push other vehicles out of the way if necessary. Do whatever you must to avoid a catastrophe. **No school bus accident is more devastating than being hit by a train.**

# **HIGHWAY-RAIL CROSSING TIP**

“I would like to share the following highway-rail crossing safety tip with other school bus drivers in NYS.”

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**Name** (if you wish): \_\_\_\_\_

**Where employed** (if you wish): \_\_\_\_\_

*Send your tip to:*

Pupil Transportation Safety Institute  
224 Harrison St, Suite 300, Syracuse, NY 13202

*or,*

fax it: 315-475-5033

*or*

email it: jim@ptsi.org

*or,*

give it to your local School Bus Driver Instructor (SBDI)

who can submit it to the state’s training program.

***THANKS FOR CARING ABOUT CHILDREN’S SAFETY***

## **New York State Safety Drill Checklist**

Use this checklist as a guide to help you conduct an effective bus safety drill:

- DRILL INTRODUCTION:** Stand up and face your students. Introduce yourself and explain why bus drills are important. Let your students know you care about their safety. Select two reliable Safety Drill Helpers ahead of time (select students seated near the rear of the bus, who ride most of the route) and introduce them to the rest of your students.
- RIDING RULES:** Read and discuss the bus rules - explain the "why's". Explain what the consequences would be if students refuse to follow the bus rules.
- EMERGENCY EQUIPMENT AND EXITS:** Let students point out and open all exits on the bus - don't forget the passenger door and roof hatches. Remind them it's dangerous to play with emergency exits.
- DISABLED DRIVER:** Demonstrate how to stop, secure, and shut off the bus; explain the importance of knowing what the bus number is; show students to how to use the 2-way radio.
- SEAT BELTS:** Explain your school policy regarding seat belt use; show students how to wear seat belts low across their hips, and fairly tight.
- PRACTICE EVACUATION:** Prevent injuries by stressing the importance of orderly evacuation practice; Safety Drill Helpers or teachers or other adults should serve as spotters as children go out the exit door. Show students how to "sit and slide" from emergency doors - don't let them "jump" off the bus, or push or shove. All personal items should be left on the bus during the practice evacuation. Before the evacuation practice begins, point out a safe area to gather after they've exited the bus. Younger students should hold hands in a "safety chain" as they walk away from the bus. To protect children, the bus should be shut off and secured, with school bus flashers activated, during bus drills.
- SAFE LOADING AND UNLOADING DEMONSTRATION:** When the evacuation practice is finished, gather your students at the front of the bus and demonstrate the Safe Crossing Rule; review the Universal Crossing Signal and Universal Danger Signal (see other side of this flier); remind students that cars don't always stop for buses; remind students to "check before they step" off the bus to avoid being struck by a car passing on the right side of the bus; let your students point out the Danger Zones around the bus; tell them never to try to get something they've dropped near the bus, or to chase after a bus they've missed. Tell children to get an adult to help them. Explain why jacket drawstrings can be dangerous. Explain that in severe weather conditions it's even more important to follow the safety rules when loading and unloading.
- CONCLUDE THE DRILL:** Thank your students after the bus drill is complete!

# ***NATIONAL LOADING ZONE STUDENT FATALITIES***

	1996	1997	1998	1999	2000	2001	2002	2003	2004
	1997	1998	1999	2000	2001	2002	2003	2004	2005
Children Killed by Front of Bus	5	2	5	7	3	2	5	1	14
Children Killed by Rear Wheels	4	3	4	4	3	3	1	2	
Children Killed by Passing Motorists	5	4	7	11	3	8	6	6	6
Other Scenarios	3	1	2	0	0	0	0	0	0
No information	2	0	0	0	0	0	0	0	0
<hr/>									
Total Children Killed	19	10	18	22	9	13	12	9	20
<u>When Fatality Occurred</u>									
Going to School	7	2	10	10	1	8	6	5	8
Activity Trip	0	0	0	0	0	0	1	0	0
Going Home	12	8	8	12	8	6	5	4	12
No information	0	0	0	0	0	0	0	0	0

*Courtesy: Kansas State Education Department*

# 2004-2005 NYS School Bus Accidents

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**Total school bus related fatalities: 0**

**Student fatalities: 0**

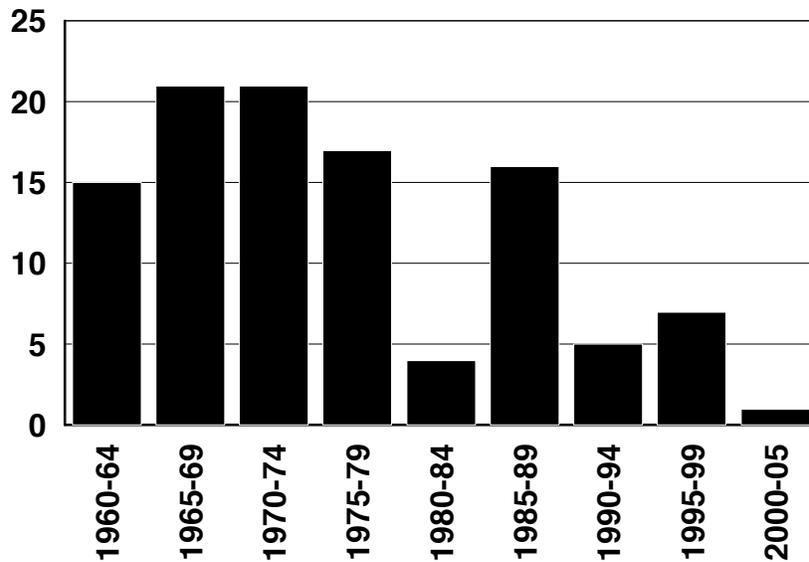
**Private school student fatalities: 0**

**Other motorist fatalities: 0**

**Pedestrian (non-student) fatalities: 0**

**Bus driver/attendant/monitor fatalities: 0**

## NYS Student Fatalities: 5 Year Blocks



# Injuries

**Total student injuries: 224**

- **Note:** student injuries decreased 38% from the previous school year! This is a significant improvement.
- **Note:** 93 of the 601 total accidents involved student injury.

## Student injury severity

- **Severe:** 0
- **Moderate:** 6
- **Minor:** 218

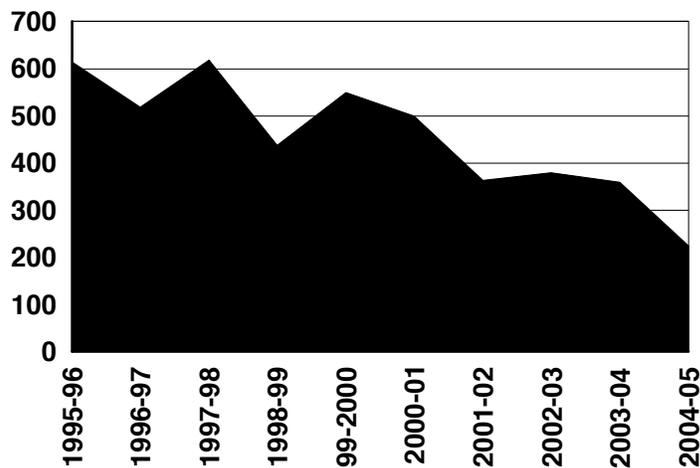
**Bus driver injuries: 42**

**Attendant/monitor injuries: 19**

**Other motorist injuries: 52**

**Pedestrian (non-student) injuries: 1**

**Student injuries by year**



## Total accidents: 601

- **Note:** total NYS school bus accidents decreased 5% from the previous year.

## Types and characteristics of accidents

**Loading and unloading accidents: 42**  
(20 loading, 22 unloading)

- **By-own-bus: 0**
- **Passing motorist: 0**
- **Bus hit while loading or unloading: 42 total.** This represents 7% of all accidents. Of these, the majority (32 of the 42) were incidents in which the bus was struck from behind.

## Backing accidents: 40

- **Note:** backing accidents increased 25% over the previous year.

## Bus-bus accidents: 18

- This represents a marked increase from last year's all-time low of 4 bus-bus accidents.

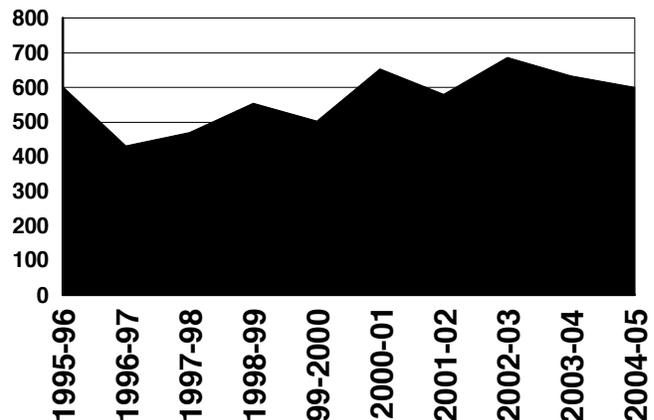
## Rollovers/layovers: 3

- One incident involved the bus driver swerving to miss a vehicle while exiting the freeway; another incident involved the bus driver losing control on a hill; the third involved the bus driver moving to the side of the road because of an approaching snow plow, and sliding into a ditch.

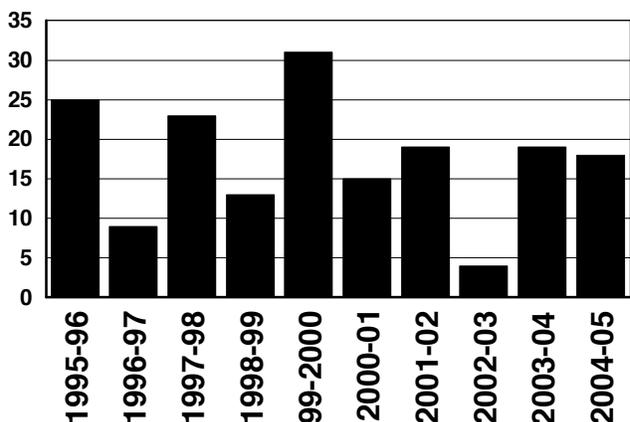
## Fire incidents: 0

- No fire incidents were reported on the MV104f.

## Total accidents by year



## Bus-bus accidents by year



## Field trip accidents: 10

- 6 field trip accidents occurred at night, 3 occurred on Saturdays, and 1 on a Sunday.
- 16 field trip accidents occurred during the previous school year.

## Non-collision injury accidents: 11

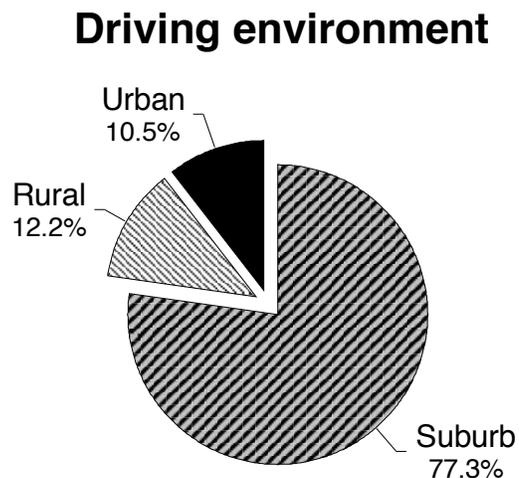
- There were 16 such incidents in the previous school year.

## Weather factors:

- **Winter:** Winter weather conditions were a contributing factor in 95 accidents (16% of all accidents). This number is comparable to the previous school year.
- **Glare:** 5 sun glare-related crashes were reported, 2 fewer than the previous school year.
- **Fog:** no fog-related accidents were reported last year.

## Other contributing factors

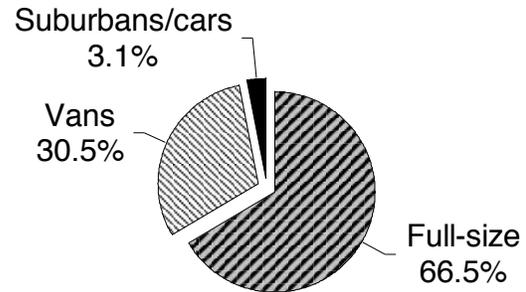
- **Intersections:** 133 intersection crashes were reported during the 2004-2005 school year, a 4% increase over the previous school year.
- **Behavior:** 10 crashes were at least partly caused by bus driver distraction due to onboard student behavior problems.
- **Following too closely:** 34 crashes resulted from the bus driver following another vehicle too closely.
- **Driveway-related accidents.** 30 accidents occurred when the bus struck a vehicle leaving a residential driveway, or the vehicle struck the bus.
- **Animal:** 3 (collisions with deer)
- **RRX:** Bus struck while stopped at RRX: 2 incidents (down from 10 in the previous year).
- **Mechanical defects:** There were no crashes due to mechanical defects in the previous school year.



## Vehicle size

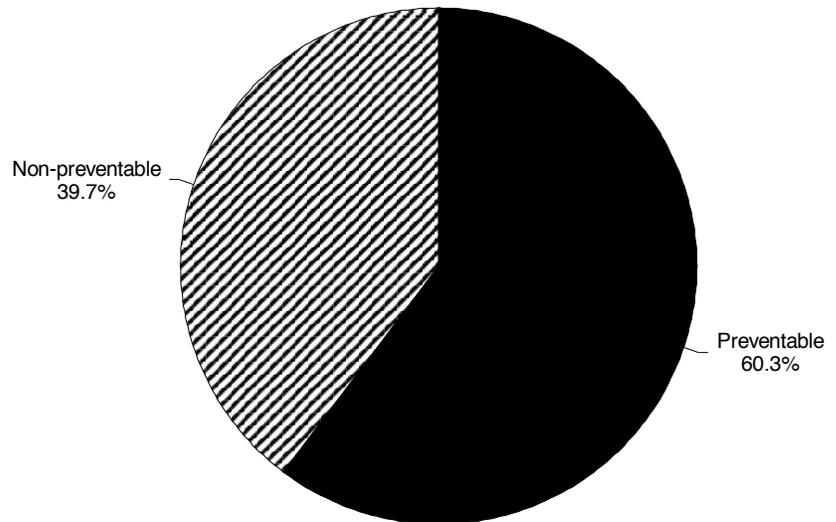
### Small school vehicles: 30%

- Vans, suburbans, and school cars were involved in 34% of all accidents. This is slightly higher than last year's figure of 30%.



### Preventability: 60%

According to information provided in the reports and following National Safety Council guidelines, 60% of all accidents in the previous year could have been prevented by the bus driver. This represents a slight increase from the previous school year.



## Driver information:

### Gender:

- Males represented 55% and females 45% of accident drivers during the past school year.

### Average bus driver age: 50 years old

- 23 accidents (4% of total accidents) involved bus drivers 70 years of age or older.

■ Preventable ▨ Non-preventable

*This report was prepared by Connie Draper and Jim Ellis of the Pupil Transportation Safety Institute for Eastern Suffolk BOCES and the New York State Education Department. Its purpose is to provide School Bus Driver Instructors, school bus drivers, attendants, monitors, supervisors, mechanics, 19-A Certified Examiners, and safety officials with information about current trends in New York State school bus accidents. Ultimately, it is hoped that this information will help prevent future accidents.*

# New York State School Bus Fatality Summary 1960-2005

SCHOOL BUS FATALITY NUMBER	Type	Age	Sex	AM AM+ PM PM+	County	School District	Date	Day Of Week	School Bus Driving Experience (In Years)	Driver Experience on route (In Years)	Driver Emp. Status	Contract or District	Bus Cap	Passengers on board at time of Fatality	Bus Design	Safety Equipment	Comments	Victim Location		
																		Front	Rear Side	
1	BOB	6	F	?	?	?	02/01/60	Monday	?	?	?	?	?	?	?	?	?	None	?	?
2	BOB	7	F	?	?	?	04/06/60	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
3	PM	6	F	?	?	?	01/30/61	Monday	?	?	?	?	?	?	?	?	?	None	?	?
4	BOB	10	F	?	?	?	04/14/61	Friday	?	?	?	?	?	?	?	?	?	None	?	?
5	PBC	7	M	?	?	?	09/08/61	Friday	?	?	?	?	?	?	?	?	?	Bus Collision with Truck	?	?
6	PM	14	M	?	?	?	11/17/61	Friday	?	?	?	?	?	?	?	?	?	?	?	?
7	PM	?	M	?	?	?	11/27/61	Monday	?	?	?	?	?	?	?	?	?	?	?	?
8	PM	10	F	?	?	?	04/09/62	Monday	?	?	?	?	?	?	?	?	?	?	?	?
9	PM	7	F	?	?	?	06/22/62	Friday	?	?	?	?	?	?	?	?	?	?	?	?
10	PM	6	F	?	Genesee	Oakfield/Ala.	11/06/62	Tuesday	?	?	?	?	?	?	?	?	?	?	?	?
11	BOB	5	M	?	Seneca	Romulus	12/18/62	Tuesday	?	?	?	?	?	?	?	?	?	?	?	?
12	BAB	5	M	?	Suffolk	Islip #12	01/29/63	Tuesday	?	?	?	?	?	?	?	?	?	Struck by Another School Bus	?	?
13	PM	5	M	?	Onondaga	Marcellus	03/05/63	Tuesday	?	?	?	?	?	?	?	?	?	None	?	?
14	BOB	5	F	?	Franklin	Salmon River	03/09/64	Monday	?	?	?	?	?	?	?	?	?	None	?	?
15	BOB	5	M	?	Erie	Grand Island	04/24/64	Friday	?	?	?	?	?	?	?	?	?	None	?	?
16	BOB	18	M	?	Westchester	Greenburgh #2	03/12/65	Friday	?	?	?	?	?	?	?	?	?	None	?	?
17	PM	11	M	?	Ontario	Canandaigua	05/02/66	Monday	?	?	?	?	?	?	?	?	?	None	?	?
18	BOB	6	M	?	St. Lawrence	Gouverneur	10/03/66	Monday	?	?	?	?	?	?	?	?	?	None	?	?
19	BOB	5	F	?	Lewis	Lowville	01/20/67	Friday	?	?	?	?	?	?	?	?	?	None	?	?
20	BOB	5	M	?	Chemung	Gandor	01/27/67	Friday	?	?	?	?	?	?	?	?	?	None	?	?
21	BOB	7	F	?	Erie	Lancaster	03/21/67	Tuesday	?	?	?	?	?	?	?	?	?	None	?	?
22	PM	6	F	?	Oneida	Rome	09/15/67	Friday	?	?	?	?	?	?	?	?	?	None	?	?
23	BOB	7	M	?	Nassau	Farmingdale	01/05/68	Friday	?	?	?	?	?	?	?	?	?	None	?	?
24	BOB	5	M	?	Ulster	Kingston	01/10/68	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
25	BOB	5	F	?	Oneida	Sherrill	03/06/68	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
26	PM	7	M	?	Nassau	Plainview	03/11/68	Monday	?	?	?	?	?	?	?	?	?	None	?	?
27	BOB	6	M	?	Cortland	Cortland	12/13/68	Friday	?	?	?	?	?	?	?	?	?	Sibling also struck	?	?
28	BOB	5	F	?	Cortland	Cortland	12/13/68	Friday	?	?	?	?	?	?	?	?	?	Sibling also struck	?	?
29	BOB	6	F	?	Nassau	North Merrick	01/20/69	Monday	?	?	?	?	?	?	?	?	?	None	?	?
30	BOB	5	F	?	Oswego	Mexico	02/10/69	Monday	?	?	?	?	?	?	?	?	?	None	?	?
31	PM	8	F	?	Oswego	Fulton	04/23/69	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
32	PBCE	11	F	?	Westchester	Yorktown	05/23/69	Friday	?	?	?	?	?	?	?	?	?	Pupil ejected from PO Bus Window	?	?
33	PM	6	F	?	Suffolk	Southampton	05/26/69	Monday	?	?	?	?	?	?	?	?	?	None	?	?
34	BOB	13	F	PM	NYC	NYC	10/14/69	Tuesday	?	?	?	?	?	?	?	?	?	None	?	?
35	BOB	10	F	PM	NYC	NYC	11/07/69	Friday	?	?	?	?	?	?	?	?	?	None	?	?
36	HOW	10	M	?	Westchester	Wappingers Falls	12/10/69	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
37	?	6	M	PM	NYC	NYC	04/29/70	Wednesday	?	?	?	?	?	?	?	?	?	Inj. after Alighting-Caus. Unkn.	?	?
38	PM	7	M	PM	Madison	Cazenovia	05/27/70	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
39	BOB	6	F	?	Nassau	Plainview	09/12/70	Friday	?	?	?	?	?	?	?	?	?	None	?	?
40	PBC	6	M	?	Ontario	Marcus-Whitman	01/30/71	Saturday	?	?	?	?	?	?	?	?	?	Snowplow Stuck Bus	?	?
41	BOB	5	M	PM	Rensselaer	Troy	03/08/71	Monday	?	?	?	?	?	?	?	?	?	None	?	?
42	PM	5	M	PM	St. Lawrence	Norwood-Norfolk	02/08/72	Tuesday	?	?	?	?	?	?	?	?	?	None	?	?
43	PM	11	M	PM	Suffolk	Hauptpaugue	02/23/72	Wednesday	?	?	?	?	?	?	?	?	?	None	?	?
44	PBC	14	M	AM	Rockland	Nyack	03/24/72	Friday	?	?	?	?	?	?	?	?	?	Train/School Bus Collision	?	?
45	PBCE	14	M	AM	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
46	PBC	16	"	AM	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
47	PBCE	"	"	AM	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
48	PBCE	18	"	AM	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
49	BOB	6	F	?	Schenectady	?	01/05/73	Friday	?	?	?	?	?	?	?	?	?	None	?	?
50	BOB	7	F	PM	Nassau	?	01/11/73	Thursday	?	?	?	?	?	?	?	?	?	None	?	?

# New York State School Bus Fatality Summary 1960-2005

SCHOOL BUS FATALITY NUMBER	Type	Age	Sex	AM	AM+	PM	PM+	County	School District	Date	Day Of Week	School Bus Driving Experience (In Years)	Driver Experience on route (In Years)	Driver Emp. Status	Contract or District	Bus Cap	Passengers on board at time of Fatality	Bus Design	Safety Equipment	Comments	Victim Location
51	BOB	5	M	PM				Erie	?	02/14/73	Wednesday	?	?	?	?	?	?	?	?	None	"
52	BOB	7	M	PM				NYC	NYC	03/01/73	Thursday	?	?	?	?	?	?	?	?	None	"
53	BOB	8	M	PM				Seneca	Seneca Falls	10/17/73	Wednesday	?	?	?	?	?	?	?	?	None	?
54	BOB	6	M	PM				Monroe	Webster	12/19/73	Tuesday	?	?	?	?	?	?	?	?	None	?
55	BOB	6	F	AM				Suffolk	Half Hollow Hills	02/21/74	Thursday	?	?	?	?	?	?	?	?	None	?
56	BOB	5	M	PM				Sullivan	Monticello	04/02/74	Tuesday	?	?	?	?	?	?	?	?	None	?
57	BOB	5	F	PM				Lewis	Harrisville	04/08/74	Monday	?	?	?	?	?	?	?	?	None	?
58	BOB	7	M	PM				Hamilton	Indian Lake	01/22/75	Wednesday	?	?	?	?	?	?	?	?	None	?
59	BOB	4	M	PM				Clinton	Beekmantown	01/22/75	Wednesday	?	?	?	?	?	?	?	?	None	?
60	BOB	4	F	PM				"	"	"	"	"	"	"	"	"	"	"	"	"	"
61	BOB	8	F	PM				NYC	NYC	02/05/75	Wednesday	?	?	?	?	?	?	?	?	None	"
62	PM	10	F	PM				Oneida	Camden	03/07/75	Friday	?	?	?	?	?	?	?	?	None	"
63	BAB	9	F	AM				Chenango	S. New Berlin	10/31/75	Friday	?	?	?	?	?	?	?	?	Backed Over by Another Bus	"
64	BOB	6	M	?				Oswego	Phoenix	01/09/76	Friday	?	?	?	?	?	?	?	?	Slipped Under Bus in Ldg. Area	"
65	PBC	17	M	?				Oswego	Cherry Valley	05/13/76	Thursday	?	?	?	?	?	?	?	?	V. Inside/Head-ON/PU Tk.	"
66	BOB	7	M	PM				Oriens	Albion	05/21/76	Friday	?	?	?	?	?	?	?	?	None	"
67	PM	5	F	AM				Onondaga	E. Syr. Minoa	05/21/76	Thursday	?	?	?	?	?	?	?	?	Slk. By Another Veh. Before PU	?
68	BOB	6	F	PM				Dutchess	Arlington	02/03/77	Thursday	?	?	?	?	?	?	?	?	V. Retrieving Papers, Windy Day	Left Rear Wheels
69	BOB	6	F	PM				Erie	West Seneca	05/25/77	Wednesday	?	?	?	?	?	?	?	?	Same As Above	Right Rear Wheels
70	BOB	6	M	PM				Nassau	Long Beach	10/05/77	Wednesday	2	0	PT	District	60	20	Cn	CM	Retriving Pencils frm. Inch bx.	Right Rear Wheels
71	PM	6	F	PM				Genesee	Pembroke	10/11/77	Tuesday	6	6	?	District	60	?	"	CM	None	"
72	HOW	8	M	PM				Suffolk	Coplaque	12/14/77	Wednesday	2	.29167	PT	District	66	06	"	CM	Last of 4 runs	"
73	DRAG	14	F	PM				Ontario	Pips Cft Spgs.	01/29/79	Monday	8	7	PT	District	66	21	"	CM	Jacket Caught in Door, Dragged	Right Rear Wheels
74	BOB	4	M	PM				Onondaga	E. Syr. Minoa	05/24/79	Thursday	7	6X	Sub.	District	65	12	"	CM	Noon Substitute	Drivers reg bus was pusher
75	PM	12	F	PM				Ulster	Saugerties	03/04/80	Tuesday	10	5	FT	Schl. Trans.	66	03	"	CM	First of 3 runs	"
76	BOB	4	M	PM				Oneida	Sly-Verona Bch	11/10/80	Monday	2	2	PT	Birnie Bs	66	08	"	CM	None	Left Front
77	BOB	12	M	PM				Nassau	Lawrence	10/12/82	Tuesday	3	1	PT	Ind Coach	60	10	"	CM	Bus going Strt. Ahead, Vic.	Left Rear Wheels
78	PM	10	M	PM				Orange	Washingtonville	03/02/84	Friday	2.5	1.5	PT	District	66	02	"	CM	V stnk in xing zone by trk	Right Rear Wheels
79	BOB	5	F	PM				Nassau	Hempstead UFS	05/15/84	Tuesday	first trp	first trp	Sub	Brown	60	20	"	CM	Mechanic Subbing Route	Right Rear Wheels
80	BOB	6	M	PM				Ulster	Little Falls	02/21/85	Thursday	3.5	3.5	PT	Brown	59	16	"	CM	Right Turn after discharge	Right Rear Wheels
81	PM	6	M	PM				Ulster	Kingston	09/09/85	Monday	Days (3)	Days (3)	Sub	Mulligan	66	06	"	CM	Bus Driver new to area. Mrst.	"
82	PBC	11	M	AM				Putnam	Mahopac	10/10/85	Thursday	8	One Month	FT	District	66	15	"	CM	Driver Reached for Falling	"
83	BOB	5	F	PM				Onondaga	Syracuse	02/05/86	Wednesday	1.5	Days (12)	Floater	Laidlaw	65	19	"	CM	Many drop chgs. on route shfts.	Right Front Wheels
84	DRAG	7	M	PM				Rockland	East Ramapo	03/19/87	Wednesday	Mo.(5-5)	Two Months	PT	Act II	65	30	"	CM	Strt. Ahead, V ching cut in	Right Rear Wheels
85	PM	5	F	AM				Suffolk	W. Babylon	03/25/87	Wednesday	3.25	3.25	PT	District	59	07	"	CM	V late, strk. by mtrst waved	"
86	PM	7	M	PM				Oswego	Fulton Cty	04/23/87	Thursday	23	18	PT	Golden Sun	66	13	"	CM	Second run. Brothers. SBD	"
87	PBC	15	F	PM				St. Lawrence	Ogdensburg	09/09/87	Wednesday	7	4	PT	Fack	60	17	"	CM	16 on board, V in Last row	"
88	BOB	6	F	AM				Westchester	Scarsdale	11/02/87	Monday	1.25	Two Months	PT	District	16	10	V	Stop Arm-Front, CM	Strt. Ahead,radio,BU Beep.	"
89	BOB	6	M	PM				Rockland	Nyack	12/10/87	Thursday	10	10	Floater	Brega	66	12	Cn	CM	Backed Over Child;drov 5 times	"
90	BOB	7	M	PM				Queens	NYC	03/07/88	Monday	22	Six Months	FT	Amboy	65	37	"	CM	Straight Ahead	"
91	BOB	5	M	PM				Rockland	East Ramapo	05/18/88	Wednesday	10	5	PT	Laidlaw	65	11	"	CM	Rt. Turn after discharge	Right Rear Wheels
92	BOB	6	M	PM				Rensselaer	Hoosick Falls	12/19/88	Monday	12	Six Months	PT	Pioneer	66	27	"	CM	Strt. Ahead/Drvr. Distracted	"
93	BOB	6	F	PM				Staten Island	NYC	03/08/89	Wednesday	8	29 Days	FT	Pioneer	71	4	"	CM	Strt. ahead., frst of 3 rns.	"
94	JFB	13	M	PM				Westchester	Mt. Vernon	05/02/89	Tuesday	.75	Three Months	FT	TFD Bus	65	4	"	CM	St. jmpt. frm. mving bus,not	SE Sid., Died frm. int. inj.
95	BOB	8	F	AM				Brooklyn	NYC	11/01/89	Wednesday	1.5	36 days	FT	Loner	66	47	"	CM	Std. late, chased bus, slipped,	"
96	PBC	6	M	PM				Orange	Monroe-Woodbury	01/30/90	Tuesday	23	Five Days	Floater	District	66	36	"	CM	Dfted. off road @45 mph, slk.	Took 2.7 sec. from living road,
97	PBC	6	M	PM				"	"	"	"	"	"	"	"	"	"	"	"	"	Victims in Rt Front Seat
98	JFB	14	M	PM				Tompkins	Newfield	05/01/90	Tuesday	.75	8 Months	FT	District	66	8	"	CM+	St. jmpt. frm. mving bus,	SE Sid. seated in rear most seat
99	HOW	13	F	PM+				Westchester	Yonkers	11/08/90	Thursday	.75	1st Time	Floater	Bronco	66	12	"	CM+	Head Struck Utility Pole DOA	3rd head out window fatality
100	BOB	11	F	PM				Brooklyn	NYC	02/19/94	Friday	1.5	1st Time	Floater	Pupil	66	3	"	CM+	dropped at Snow Bank and Slip	Right Rear Wheels

## New York State School Bus Fatality Summary 1960-2005

SCHOOL BUS FATALITY NUMBER	Type	Age	Sex	AM+ PM	County	School District	Date	Day Of Week	School Bus Driving Experience (In Years)	Driver Experience on route (In Years)	Driver Emp. Status	Contract or District	Bus Cap	Bus Passengers on board at time of Fatality	Bus Design	Safety Equipment	Comments	Victim Location			
																		Front	Rear	Side	
101	PBC	13	M	AM	Greene	Cairo-Durham	02/02/95	Thursday	0	0	PT	Chalet	6	4	NCV	None	1987 Toyota Van	Middle	Right		
102	DRAG	14	F	PM	Westchester	Ivington	02/08/96	Thursday	?	?	?	Advance	?	?	CONV	Handrail/not retrofitted	Drawstring caught in handrail	Right rear	wheels		
103	HOW	17	M	PM	Suffolk	Bay Shore	05/21/96	Friday	?	?	?	Suffolk	?	?	?	?	Utility pole leaning in				
104	PM	8	M	PM	Queens	NYC	06/21/96	Thursday	?	?	?	Atlantic	?	?	?	?	Ht and run driver				
105	BOB	6	M	PM	Erie	Amherst	01/29/97	Wednesday	9	3 Months	PT	National	72	?	CONV	Stop Arm/Crossing Arm	Driver ran over child	Right front	wheel		
106	BOB	6	M	AM	Brooklyn	NYC	05/18/98	Monday	6	3 Months	FT	Caravan	66	35	CONV	Stop Arm	Child ran 2 blocks 2 catch bus	Right rear			
107	PM	6	F	PM	New Rochelle	New Rochelle	01/04/99	Monday	15	6	FT	Wykagyl	66	6	CONV	No Crossing Gate	Truck turning into inter. Struck child	Opposing lane			
108	PM	7	F	PM	Madison	Stockbridge Valley CSD	05/21/04	Friday	5	5	FT	District	65	46	CONV	Stop Arm	Driver passed bus on right side, struck child	Right Side			
109																					
110																					
111																					
112																					
113																					

Prepared by IRA CHUDD 2/8/2006

## New York State Charter Bus Fatality Summary 1960-2005

III. CHARTER BUS FATALITY NUMBER	Type	Age	Sex	AM AM+ PM PM+	County	School District	Date	Day Of Week	School Bus Driving Experience (In Years)	Driver Experience on route (In Years)	Driver Emp. Status	Contract or District	Bus Cap	Passengers on board at time of Fatality	Bus Design	Safety Equipment	Victim Location		Victim Location/Driver Side			
																	Front	Rear	Side	Side		
1001	PBCE	15	M	PM+	Tioga	Vestal	01/03/73	Wednesday	?	?	?	Contract	?	?	?	Ejected-Bus Rolled Over				?		
1002	PBCE	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
1003	PBCE	16	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
1004	PBCE	13	M	"	Warren	E Meadow	04/11/92	Saturday	0	0	FT	GRAY LINE	49	27	CHARTER COACH	NONE	DRVR TICKET SPEED SNOW SLUSH, T 25 S INJRD				EJECTED & CRUSHED BY BUS	
1005	PBCE	12	"	"	Warren	E Meadow	04/11/92	Saturday	0	0	FT		49	27		NONE						EJECTED & CRUSHED BY BUS

Prepared by IRA CHUDD 2/8/2006

# KEY

<p><b>KEY:</b></p> <p><b>TYPE</b></p> <p>BAB BY ANOTHER BUS #12,63</p> <p>BOB BY OWN BUS 56 FATALITIES</p> <p>HOW HEAD OUT OF WINDOW #36, 72, 99, 103</p> <p>JFB JUMPED FROM BUS #94, 98</p> <p>PBC PASSENGER BUS COLLISION #5, 40, 44, 46, 65, 82, 87, 96, 97, 101</p> <p>PBCE PASSENGER BUS COLLISION EJECTION #32, 45, 47, 48, 1001-1005</p> <p>PM PASSING MOTORIST 27 TOTAL</p> <p>DRAG # 73, 84, 102</p> <p>? UNKNOWN ACCIDENT CAUSE OR SITUATION #37</p> <p><b>TIME</b></p> <p>AM REGULAR TRIP TO SCHOOL</p> <p>PM REGULAR TRIP HOME FROM SCHOOL</p> <p>AM+ ACTIVITY TRIP DAYTIME</p> <p>PM+ ACTIVITY TRIP AFTER SCHOOL</p> <p><b>DRIVER EMPLOYEE STATUS</b></p> <p>PT PART TIME, REGULAR EMPLOYEE LESS THAN 8 HOURS PER DAY</p> <p>FT FULL TIME EMPLOYEE</p> <p>SUB SUBSTITUTE, DOES NOT WORK ON A REGULAR BASIS</p> <p>FLOATER FILLS IN FOR REGULAR DRIVERS ON A REGULAR BASIS</p> <p><b>SAFETY EQUIPMENT</b></p> <p>CM MINIMUM REQUIRED Crossover MIRRORS</p> <p>CM+ MORE EXTENSIVE MIRROR SYSTEM THAN REQUIRED</p> <p>PA OUTSIDE THE BUS PUBLIC ADDRESS SYSTEM</p> <p>SAF STOP ARM IN FRONT OF BUS</p> <p>SAR STOP ARM IN REAR OF BUS</p> <p>OMS OUTSIDE MOTION SENSOR</p> <p>CCA CROSSING CONTROL ARM</p>	<p><b>CHILD LOCATION AT TIME OF SCHOOL BUS ACCIDENT</b></p> <table border="1"> <thead> <tr> <th>PEDESTRIAN</th> <th>PASSENGER</th> <th>UNKNOWN</th> </tr> </thead> <tbody> <tr> <td>BAB 2</td> <td>HOW 4</td> <td>? 1</td> </tr> <tr> <td>BOB 56</td> <td>JFB 2</td> <td></td> </tr> <tr> <td>PM 27</td> <td>PBC 10</td> <td></td> </tr> <tr> <td>DRAG 3</td> <td>PBCE 4</td> <td></td> </tr> <tr> <td>TOTAL 88</td> <td>TOTAL 20</td> <td>TOTAL 1</td> </tr> <tr> <td colspan="3">GRAND TOTAL 86+20+1=109</td> </tr> </tbody> </table> <p><b>CHILD LOCATION AT TIME OF COACH ACCIDENT</b></p> <table border="1"> <thead> <tr> <th>PASSENGER</th> </tr> </thead> <tbody> <tr> <td>PBCE 5</td> </tr> <tr> <td>TOTAL 5</td> </tr> </tbody> </table> <p><b>BUS DESIGN IN FATAL ACCIDENTS</b> 38 FATAL ACCIDENTS SINCE 7/1/77</p> <table border="1"> <tbody> <tr> <td>CONVENTIONAL SCHOOL BUS</td> <td>36</td> </tr> <tr> <td>VAN STYLE SCHOOL BUS</td> <td>1</td> </tr> <tr> <td>COACH BUS</td> <td>1</td> </tr> <tr> <td>TRANSIT STYLE SCHOOL BUS</td> <td>0</td> </tr> <tr> <td>NON CONFORMING VEHICLE</td> <td>1</td> </tr> <tr> <td>UNKNOWN</td> <td>3</td> </tr> <tr> <td>TOTAL</td> <td>39</td> </tr> </tbody> </table> <p><b>DISTRICT/CONTRACTOR ACCIDENT TYPE AND FREQUENCY</b></p> <table border="1"> <thead> <tr> <th></th> <th>BOB</th> <th>PM</th> <th>PASSENGER</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>DISTRICT</td> <td>5</td> <td>4</td> <td>3</td> <td>11</td> </tr> <tr> <td>CONTRACT</td> <td>15</td> <td>5</td> <td>6</td> <td>26</td> </tr> <tr> <td>TOTAL</td> <td>20</td> <td>8</td> <td>9</td> <td>37</td> </tr> </tbody> </table> <p>AVERAGE YEARS DRIVING EXPERIENCE = 6 DRIVER WAS TWO MONTHS OR LESS ON ROUTE = 40%</p>	PEDESTRIAN	PASSENGER	UNKNOWN	BAB 2	HOW 4	? 1	BOB 56	JFB 2		PM 27	PBC 10		DRAG 3	PBCE 4		TOTAL 88	TOTAL 20	TOTAL 1	GRAND TOTAL 86+20+1=109			PASSENGER	PBCE 5	TOTAL 5	CONVENTIONAL SCHOOL BUS	36	VAN STYLE SCHOOL BUS	1	COACH BUS	1	TRANSIT STYLE SCHOOL BUS	0	NON CONFORMING VEHICLE	1	UNKNOWN	3	TOTAL	39		BOB	PM	PASSENGER	TOTAL	DISTRICT	5	4	3	11	CONTRACT	15	5	6	26	TOTAL	20	8	9	37
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## **2006-2007 New York State School Vehicle Accident Reporting Requirements**

*If the following conditions are met, the bus driver must file NYS DMV Form MV104F, "Accident Report for School Vehicles," within 10 days. Failure to file is a misdemeanor and can result in a license or registration suspension.*

### **Use the MV104F only if the following conditions are met:**

**If** the school vehicle involved in the accident (see below) was owned or contracted for by a school;

(Note: "school vehicle" may include any type of vehicle, including a passenger car or van, so long as it is owned or contracted for by a public or private school and being used for transportation to or from school or school activities. The term "school vehicle" is **NOT** limited to yellow school buses.)

**And** the school vehicle was in the process of transporting, or picking up or discharging, students, children of students, teachers, bus monitors, or supervisory personnel;

(Note: the bus is considered "involved in the accident" even if it didn't physically contact another vehicle or person, if the bus driver had activated, or should have activated, the flashing yellow overhead warning lights as the bus approaches a stop, or has stopped with its red flashers activated, until children are safely out of the roadway and at least 15' from the bus.)

(Note: if no passengers were being transported, picked up, or discharged when the accident occurred - for instance, a bus driver "deadheading" back to base, or a mechanic road-testing a bus - do not use the MV104F.)

### **And one or both of the following:**

An injury or death occurred to any party involved in the accident (injury can range from complaint of pain with no visible injury, to severe injuries - see the back of the MV104F for definition of injury categories); **and/or**

Property damage (including damage to a vehicle or a fixed object such as a fence, house, pole, etc.) occurs to any one party in excess of \$1000.

**If the above conditions are not met, do not file an MV104F.** However, you may still be required to file an MV104, "Report of Motor Vehicle Accident."

If the above conditions are met, the bus driver must file the report within 10 days. Your supervisor should have a blank MV104F form, or they may be obtained from DMV; ask your supervisor for assistance in completing the form.

### **Follow these guidelines in completing the form:**

Print legibly, using black ink - or type.

Your vehicle (the school vehicle) is Vehicle No. 1 (left side of form) If you are filing the report because damage to another vehicle or fixed property is in excess of \$1000, clearly state that damage was in excess of \$1000 in the section "Describe Damage to (Vehicle No. 2)" on right side, middle, of form.

All sections of the form must be filled out. This includes the center "SCH" section (which runs the entire width of the form) which asks for information about bus driver experience and training and Date," as well as the 11 boxes along the right side of the form (fold the form in half vertically so the back matches with the front, for an explanation of what the boxes mean).

If more than two vehicles were involved, use a second MV104F. Note page numbers at top of forms.

In the “ALL PERSONS INVOLVED” section , names of all passengers on the bus must be listed, not just those injured. For injuries, consult the “Injury Codes” section on the back of the MV104F to determine classifications. Note that even a “complaint of pain - no visual injury” constitutes an injury in this instance.

In describing the accident, carefully and honestly explain your version of what happened. The form is a legal document. Answer this question in your explanation: “How did you first become aware that an accident was going to occur or had occurred?” Attach additional sheet(s) of description if you wish.

## **Non-collision injuries**

Injuries that result from non-collision events, such as a student falling from a bus seat, may still need to be reported on the MV104F. NYS Vehicle and Traffic Law (Section 605) does not restrict accident reporting requirements to collisions but to “a motor vehicle which is in any way involved in a accident” (emphasis added). Report non-collision school vehicle injuries on the MV104F if:

If the injury resulted from the actions of the bus driver or another motorist.

For instance, if the injury occurs when a student falls from the bus seat because the bus swerved suddenly to avoid a car running a stop sign, the MV104F should be filed, because careless actions on the part of the other motorist contributed to the injury.

Or, if the bus goes off the road because the bus driver failed to properly negotiate a curve, and the student falls from the seat when the bus hits a bump on the shoulder, the MV104F should be filed.

Or, if a student riding in a wheelchair tips over and is injured, a MV104F should be filed, since the wheelchair was not adequately secured during transport.

However, if one student injures another during a fight on the bus, or a student slips and falls on the bus steps, a MV104F does not have to be filed, since bus driver actions did not contribute to the injury.

***Note:** additional requirements beyond reporting an accident according to the above guidelines, such as drug and alcohol testing, may also apply after an accident. Ask your Supervisor or Manager for assistance.*

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**To obtain MV104F forms, contact NYS DMV, Forms Inventory Control,  
Empire State Plaza, Albany, NY, 12228.**

**For questions about reporting a school bus accident, contact the  
Pupil Transportation Safety Institute at 800-836-2210.**

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## SCHOOL BUS DRIVERS: IMPORTANT SAFETY ALERT

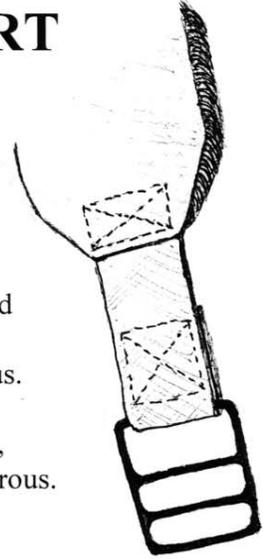


### CHILDREN'S CLOTHING CAUGHT ON THE BUS

Across the U.S., children continue to be injured or killed when their clothing is caught in the bus handrail, door, or other equipment, and they are dragged by the bus.

Long jacket or sweatshirt drawstrings, backpack straps, or long scarves or other loose clothing are especially dangerous.

Your vigilance can prevent a tragedy. Remember these student loading and unloading safety tips:



- ***Never move the bus unless you are absolutely certain all children are safely out of the Danger Zones. Never rush while unloading children.***
- ***Count children as they exit the bus - if you've lost count of a child outside the bus, shut the bus off, secure it, and check underneath.***
- ***Watch for children with long drawstrings or other loose clothing, or children carrying loose papers or other items - expect the unexpected.***
- ***Make sure your bus handrail is not attached to the bus at such an angle that it can easily catch a drawstring - check with your supervisor - dangerous handrails should be changed immediately.***
- ***Remember that children's clothing has also been caught in bus doors, the fire extinguisher, seatbelts, and the step outside the entrance door.***
- ***After discharging, carefully scan the entire area before moving, and be alert for any warnings (from bystanders, teachers, or motorists outside the bus, or students inside) as you pull away from the stop. Quiet your passengers and turn radio down so you can hear last-second warnings.***

**LOADING AND UNLOADING CHILDREN  
IS THE MOMENT OF TRUTH -  
LET NOTHING DISTRACT YOU**

## IMPORTANT TRAFFIC SAFETY ORGANIZATIONS

### **AAA Foundation for Traffic Safety**

607 14th Street NW, Suite 201  
Washington, DC 20005  
Tel: 202-638-5944 or contact your local AAA  
Web: <http://www.aaafoundation.org/home/>  
Email: [info@aaafoundation.org](mailto:info@aaafoundation.org)

### **Insurance Institute for Highway Safety**

1005 N. Glebe Rd., Suite 800  
Arlington, VA 22201  
Tel: 703-247-1500  
Web: <http://www.hwysafety.org/>  
Email: [publications@iihs.org](mailto:publications@iihs.org)

### **National Association for Pupil Transportation (NAPT)**

1840 Western Avenue  
Albany, NY 12203  
Tel: 800-989-NAPT  
Web: <http://www.napt.org/>  
Email: [info@napt.org](mailto:info@napt.org)

### **National Transportation Safety Board (NTSB)**

490 L'Enfant Plaza, SW  
Washington, DC 20594  
Tel: 202-314-6000  
Web: <http://www.nts.gov/>  
Email subscription service:  
[www.nts.gov/registration/registration.htm](http://www.nts.gov/registration/registration.htm)

### **National Safety Council**

1121 Spring Lake Drive  
Itasca, IL 60143-3201  
Tel: 630-285-1121  
Web: <http://www.nsc.org/>  
Email: [info@nsc.org](mailto:info@nsc.org)

### **New York Association for Pupil Transportation (NYAPT)**

266 Hudson Avenue  
Albany, New York 12210  
Tel: 518-463-4937  
Web: <http://www.nyapt.org/>  
Email: [nyapt-lak@nycap.rr.com](mailto:nyapt-lak@nycap.rr.com)

### **New York Governor's Highway Traffic Safety Committee**

Department of Motor Vehicles  
6 Empire State Plaza, Room 414  
Albany, New York 12228  
Tel: 518-474-5111  
Web: [www.nysgtsc.state.ny.us/](http://www.nysgtsc.state.ny.us/)

### **New York School Bus Contractors' Association**

One Stueben Place, 2nd Floor  
Albany, NY 12207  
Tel: 518-461-0066  
Web: <http://www.nysbca.com/>  
E-Mail: [faheyw@wemed.com](mailto:faheyw@wemed.com)

### **National Highway Traffic Safety Administration (NHTSA)**

400 Seventh Street, SW  
Washington, DC 20590  
Tel: 888-327-4236  
Web: <http://www.nhtsa.dot.gov/>  
Email: <http://www.nhtsa.dot.gov/email.cfm>

### **National School Transportation Association (NSTA)**

113 South West Street, 4th Floor  
Alexandria, VA 22314  
Tel: 703-684-3200  
Web: <http://www.schooltrans.com/>  
Email: [info@yellowbuses.org](mailto:info@yellowbuses.org)

### **Operation Lifesaver**

1420 King St., Suite 401  
Alexandria, VA 22314  
Tel: 800-537-6224  
Web: <http://www.oli.org/oli>  
Email: [general@oli.org](mailto:general@oli.org)

### **Pupil Transportation Safety Institute (PTSI)**

224 Harrison St., Suite 300  
Syracuse, NY 13202  
Tel: 315-475-1386  
Web: [www.ptsi.org](http://www.ptsi.org)  
Email: [info@ptsi.org](mailto:info@ptsi.org)

### **School Bus Fleet (magazine)**

2106 S. Western Avenue, P.O. Box 2703 Torrance, CA 90509  
Tel: 310-533-2400  
Web: <http://www.schoolbusfleet.com/>  
Email: [steve.hirano@bobit.com](mailto:steve.hirano@bobit.com)

### **School Transportation News (magazine)**

P.O. Box 789  
Redondo Beach, CA 90277  
Tel: 800-477-8816  
Web: <http://www.stnonline.com>  
Email: [bpaul@stnonline.com](mailto:bpaul@stnonline.com)